Seattle's Building **Emissions Performance Standard (BEPS)**

Public Webinar — May 22, 2025

Nicole Ballinger, Building Emissions Performance Standard Manager Gemma Holt, BEPS Rulemaking Advisor Facilitation by SBW Consulting and Unrooz





OSE & Consultant Team for Rulemaking

OSE Team

BEPS Program Manager, Rulemaking Advisor, Buildings & Energy Acting Director, Outreach Specialist Subject Matter Experts (e.g., benchmarking)



Seattle

Technical / Analysis Consultant SBW Consulting Inc. WMBE Firm



Facilitators Unrooz Solutions WMBE Firm







ce of Sustainability Environment

Webinar #1 Recap

- BEPS Background & Rulemaking Intro
- Covered Buildings & BEPS Requirements
- Draft Rule Proposals
 - Exemptions
 - What is a Qualified Person?
 - Benchmarking Verification
 - Compliance Metrics
 - End Use Deductions
 - Extensions

Catch up on BEPS

- <u>BEPS Rulemaking</u>
 <u>Webinar #1</u>
- <u>BEPS Basics</u> <u>Presentation</u>
- BEPS FAQs



Zoom Q&A

- Click on the **Q&A button on the toolbar** to open the Q&A panel.
- Click Send to submit your question to the host and panelists.
- Your question will be listed in the Q&A panel, and you can see any responses from the panelists or host.
- View all questions and upvote other attendee questions by clicking the thumbs-up.







Captioning

• Select "Show captions" to turn on live automatic captioning



Note: If you are having issues with Zoom controls, email facilitator@sbwconsulting.com (Don't send BEPS questions.)





My speaking language: English >



Agenda

- BEPS Background and Rulemaking Intro
- Covered Buildings
- Penalties and Enforcement
- Draft Rule Proposals
 - Compliance metrics
 - Compliance with more than one building
 - Aggregate GHGIT
- Q&A
 - Alternate GHGIT
 - Alternative Compliance Payment
 - Multifamily Prescriptive Path
 - Decarbonization Plans
- Q&A



Submit questions as you have them. First 15-minute Q&A period is after Aggregate GHGIT, second at the end of the presentation



Meeting 1: Reminders





"The Building Emissions Performance Standards (BEPS) policy continues Seattle's leadership on climate action and represents a milestone for our city's efforts to reduce greenhouse gas emissions and build healthy communities," said Mayor Bruce Harrell.

"This bold legislation will not only create cleaner buildings for people to live, work, and play in, but also hundreds of local jobs and build pathways to careers in the green economy..."

> Mayor Bruce Harrell, BEPS Press Release, December 13, 2023



What is a Building Performance Standard?

A **BPS** requires existing buildings to meet greenhouse gas emissions or energy performance targets by specific deadlines.

Decarbonization — another word for reducing

emissions.

Seattle BEPS is an emissions standard





BEPS is effective

By requiring most existing large buildings to reach net-zero emissions, **BEPS is projected to reduce greenhouse gas emissions by about 325,000 metric tons by 2050.**

- That represents a 27% decrease in building related emissions from a 2008 baseline.
- Or the equivalent of 72,322 gasolinepowered cars taken off the road for a year.





Technical Support & Funding!

• Building Decarbonization Grants — Up to about \$4.0M for engineering design and/or implementation! Affordable housing and nonprofits are prioritized. Application open now! Closes July 10.



• <u>Building Emissions Navigator</u> — Free coaching and other technical support for your building's BEPS journey.



LIHI's Denny Park and SHA's Jefferson Terrace and Lake City Court were among the funded buildings in 2024.

Rulemaking Timeline



Rulemaking Goals for OSE

Per Seattle Municipal Code a Director's Rule is the required next step to clarify the code elements (e.g., timeline for exemptions requests, documentation required.)

- ✓ Engaged key stakeholders who have an opportunity to constructively contribute
- \checkmark A rule that maintains the stringency of BEPS and explains how to use the flexibility
- ✓ A readable, approachable final Director's Rule document





1st Director's Rule Timeline Overview

Q2 2024	Q3 2024	Q4 2024	
Ongoing BEPS outreach,	education and program de	evelopment	
Rules planning	Focused engagement, ge	eneral comments	Draft I
	Technical Rulemaking Wo	orkgroup (Facilitated)	
		Focused Topical Meeting spaces, downtown, deca	
Required by Seattle Municipal Code	<u>Link to sli</u>	۲ des and meeting s	<u>sum</u> r
Additional Public Engagement			



BEPS Covered Buildings



Covered Building Types: Nonresidential & Multifamily Larger than 20,000 SF* - Examples



F5 Tower 960,655 ft²





The Home Depot Lander 108,930 ft²



Yesler Community Center 29,500 ft²





Mid-Rise MF 103,100 ft²





Building Types Not Subject to BEPS Law

- Industrial/manufacturing
- Small nonresidential and multifamily (less than 20,000 SF)
- •Single-family homes







What Does BEPS Require of Building Owners?

Every five years:



Energy Benchmarking Verification: Verify previous year's building energy use and emissions. By 2027–2030



GHG Report: Document current GHGI/GHGIT and equipment, and outline actions to achieve targets. *By 2027–2030*



Meet Greenhouse Gas Intensity Targets (GHGIT). Or use alternative compliance. *By 2031–2035*



Achieve net-zero emissions with narrow exceptions. *By 2041–2050 (depending on building type and size)*

Building Tune-Ups requirements will sunset after the 2026 compliance cycle is done.



Three Compliance Pathways for Flexibility

PATH A Meet standard or building portfolio/ campus GHGIT at all 5-year intervals

PATH B Comply with extension or basic alternate compliance

Benchmarking Verification GHG Report Meet standard GHGI Targets Achieve Net Zero — 2041–2050

Emissions Deductions:

Emergency generators, district steam, and fossil fuel cooking, in-unit condo equipment, & more.*

Extensions:

Extended timeline for low-income/ rent housing, financial distress, new construction, high vacancy

Alternate Compliance:

- ACP payment (2031–2035)
- Multifamily prescriptive paths
 - Alternate GHGIT

Exemptions: Electric only buildings exempt from GHGI Targets and building demolition (all requirements.)

* Some deductions are time limited. Can be used for paths B & C.

PATH C

Custom timeline or targets due to hardship or unique circumstances

Decarbonization Plans:

- Net-Zero by 2050
- Low-Emissions by 2050
- Require audit & cost analysis.

Hardship Eligibility Criteria:

Historic status, sub-alt, or seismic upgrade, infeasible for low-income multifamily or structural/electric upgrades & more.

District Campus Decarbonization Plan:

For campuses with district energy



Penalties & Enforcement



Penalties, a last resort

Fines will only be leveled once per compliance interval:

Failure to report:

- \$15,000 for buildings over 50,000 SF
- \$7,500 for buildings 20,000–50,000 SF

Inaccurate reporting:

- \$15,000 for buildings over 50,000 SF
- \$7,500 for buildings 20,000–50,000 SF

Not achieving greenhouse gas intensity target:

- \$10.00/SF for nonresidential buildings
- \$7.50/SF for multifamily buildings
- \$2.50/SF for low-income or low-rent multifamily housing





Emphasizing Support <u>Before</u> Enforcement

- **360-day grace period** after compliance deadline before any fines are issued.
- Director may reduce penalty if no more than 20% above target.
- Director has authority to **mitigate fines** and to **establish grace periods** for penalties for all buildings.



History with Energy Benchmarking and Building Tune-ups

Greater than 95% compliance, mostly due to extensive outreach and compliance support!



Meeting 2: BEPS Draft Rule Proposals

Note: This webinar presents a selection of BEPS draft rule proposals informed by feedback from the technical workgroup and several focused meetings. These proposals may be updated or changed pending ongoing stakeholder reviews, as well as the forthcoming official public comment period in planning for June 2025





Law versus Rule: Two Examples

What's in the Law (SMC 22.925)

- Lists the eligible exemptions and some eligibility criteria
- Includes provisional emissions factors for 2031-2035

Rule

• Explains:

- Details of the Eligibility Criteria
- Info on How to Report
 - Reporting Deadlines
 - Documentation Required

What's in a Director's

• Updates: Rule by Dec. 31, 2027, will update factors (not

doing in this 1st Rule)



Compliance Metrics





BEPS Uses Building Activity Type Targets (Meeting 1)

Building Activity Type	2031 - 2035	2036 - 2040 ¹	2041 - 2045 ^{1, 2}	2046 - 2050 ^{1, 3}	Building Activity Type	2031 - 2035	2036 - 2040 ¹	2041 - 2045 ^{1, 2}	2046 - 2050 ^{1, 3}
College/University	2.69	1.57	0	0	Office	0.81	0.47	0	0
Data Center	1.43	0.83	0	0	Other	2.48	1.45	0	0
Entertainment/	1 1 0	0.00	0	0	Recreation	3.22	1.88	0	0
Public Assembly	1.18	0.69	0	0	Refrigerated	0.98	0.57	0	0
Fire/Police Station	2.23	1.30	0	0	Warehouse				
Hospital	4.68	2.73	0	0	Residence Hall/ Dormitory	1.16	0.68	0	0
Hotel	2.06	1.20	0	0	Restaurant	5.73	3.34	0	0
K-12 School	0.95	0.56	0	0	Retail Store	1.03	0.60	0	0
Laboratory	6.30	3.68	0	0	Self-Storage Facility	0.31	0.18	0	0
Medical Office	2.11	1.23	0	0	Senior	२ 11	1 77	0	0
Multifamily Housing	0.89	0.63	0.37	0	Living Community	2.11	1.23	0	0
Museum	2.11	1.23	0	0	Services	1.36	0.79	0	0
Non-Refrigerated	0.77	0.45	0	0	Supermarket/ Grocery Store	3.42	2.00	0	0
Warehouse	0.77	0.45	U	U	Worship Facility	1.20	0.70	0	0



Meeting 1: GHGIT Prorating Buildings with multiple space types can prorate the GHGIT.

Building Activity Types	Space GFA (SF)	Percent of GFA (SF)	Bldg. Activity GHGIT	Pro-rated GHGIT
Office	60,000	80%	.81	.64
Retail	10,000	13%	1.03	.13
Gym (Recreation)	5,000	7%	3.22	.23
Total GFA	75,000		GHGIT	1.00

Note: The Director's Rule reference an appendix that maps all **ENERGY STAR Portfolio** Manager Property / Space types to BEPS Building Activity Types.

(e.g., Gym maps to Recreation BAT)



Seattle ce of Sustainability

RULE TOPIC: Space Use Rules for Calculating the BEPS GHGI Target

- Include all building gross floor area (GFA) in the GHGIT calculation
- Break out different space uses (e.g., office, retail, laboratory) if greater than 5,000 SF
 - Break out **all restaurant spaces** regardless of floor area
- **Combine space uses less than 1,000 SF** with the largest space type (unless Restaurant).
 - Spaces between 1,000 SF and 5,000 SF may be broken out or combined at the discretion of Qualified Person
- **Combine multiple spaces of same type** (e.g., add the floor area of each retail store into one total retail square footage)

GHGIT will be calculated with a new online reporting tool

Total GFA must be used for ESPM and the City online tool.

For ESPM space use breakout set-up, OSE will consider exceptions if the building is required to meet the WA CBPS EUI Target (nonresidential >50,000 SF)



How will reporting happen? New BEPS & Benchmarking Reporting Tool

EXISTING BENCHMARKING REPORTING



Owner/Provider:

Enters GFA & space uses Utility consumption (from City Light, PSE, CenTrio) **Reported to City**



IN DEVELOPMENT

BEPS & BENCHMARKING TOOL Pulls ENERGY STAR PM Data

Owner/Qualified Person:

Benchmarking Verification GHG Report Details **Create GHGI Target**

Create "Compliance GHGI" (ESPM GHGI — BEPS Deductions)

Reported to City



eattle <u>ce of</u> Sustainability Environment

Compliance with More than One Building



BEPS Law — Multiple Building Definitions

Buildings on adjacent parcels

Buildings on different parcels



Shared mechanical



Shared thermal

"Building portfolio" means two or more covered buildings on one or more lots, all owned by the same public, private, or nonprofit entity. Building portfolios may include district campuses and/or connected buildings... Examples: Seattle Public Schools, CRE Portfolio

Ward Street



"Connected buildings" means two or more covered buildings owned by the same building owner that are situated on the same or adjacent parcels and have shared mechanical or metering equipment... Examples: Two buildings shared a meter, a "campus"

District Campus





"District campus" means two or more covered buildings on the same or adjacent parcels owned by the same building owner that is served by a campus district heating, cooling, water reuse, and/or power system... Example: A campus with a centralized district plant





Building portfolios can be straightforward

- parcels
- Already benchmarked separately
- portfolio

• Multiple buildings on different or adjacent

• Example: Seattle Public Schools, Seattle Housing Authority, commercial real estate



Connected buildings and district campus setups can be confusing...

- A "campus" with some connected buildings and some stand-alone (metered separately).
- A district campus with most buildings on the central plant, and some stand-alone (metered separately).
- Buildings less than 20,000 SF may be on the campus.
- Configurations change over time buildings are demolished, built, expanded, etc.
- And so on...

BEPS Rule Goal: Clear and concise rules that support flexible compliance for "campuses," as opposed to solving for all scenarios.





Basic requirements for multi-building compliance in BEPS Law

- Building portfolios, district campus, or connected buildings are required to comply mid-cycle (e.g., 2028, 2033, 2038, etc.).
- A building may not be in more than one multibuilding application and GHG report.
- Multi-building configurations are assumed to be the same for all compliance intervals.
 - Multi-building applications must be resubmitted for COS review if there are any changes.





Options for Multi-Building Compliance in BEPS Law

Building Portfolio

- Aggregate GHGIT
- Alternate GHGIT
 (public / nonprofit building
 portfolios only)
- Alternative Compliance Payment (2031–2035)

Connected Buildings

- Aggregate GHGIT
- Alternate GHGIT
- Alternative Compliance Payment (2031–2035)

Exception: Per SMC 22.925.100, the public owner of a building portfolio whose primary purpose is to provide education at no cost and who is funded through state and local taxes may apply to use a decarbonization compliance plan covering multiple buildings within the owner's building portfolio."



Compliance Plan



RULE TOPIC: Ownership Verification

Building owners must provide an attestation of shared ownership. Supporting documentation may be required by OSE. Acceptable documentation:

- 1. Evidence that all buildings have the same building owner listed in King County Dept. of **Assessments records**
- 2. A copy of a deed that shows the LLC is part of the parent company or a copy of a title transfer from the LLC to the parent company
- **3. A certificate signed by the corporate secretary** for the owner that affirms they are the majority owner of a property
- 4. A certificate signed by the Executive Director of a charitable organization that affirms all buildings are owned or partly-owned by the same charitable organization


RULE TOPIC: Including Buildings less than 20,000 SF in a Multi-Building Report

Building Portfolio

 Do not include buildings less than 20,000 SF

Note: These are buildings that are benchmarked & metered separately with *minor exceptions (e.g., two similar* buildings that share a meter)

Note: Buildings less than 20,000 square feet are not required to achieve emissions reductions but may be counted towards the emissions reduction.

Connected Buildings & District Campus

• If submetered, do not include buildings less than 20,000 SF

Otherwise include emissions and GFA



Compliance with More than One Building: Aggregate GHGIT



Aggregate GHGIT

Per BEPS law "Aggregate standard GHGIT" means that an owner with multiple **buildings** can set and meet their GHGIT, based on a prorated mix of spaces for all their buildings' square footage combined, in lieu of building by building compliance.



2031–2035 Targets:

0.89 kgCO₂e/SF/yr 60,000 SF, 22% of total SF

0.81 kgCO₂e/SF/yr 85,000 SF 32% of total SF

2.06 kgCO₂e/SF/yr 125,000 SF, 46% of total SF

Aggregate **GHGIT** for 2031-2035 1.41 kgCO₂e/SF/yr





RULE TOPIC: Handling All-Electric Buildings in Portfolios

Proposal for Rule

Building owners can <u>choose between two options</u>:

Option 1: Do Not Include in Portfolio (Take all-electric exemption)

- Buildings that are verified as using only electric energy are exempt from GHGIT requirements & GHG reporting
- Exempted all-electric buildings cannot be included in aggregate GHGIT (or compliance GHGI for the portfolio)

Option 2: Include in Portfolio (Don't take all-electric exemption)

- Building owners may include all-electric buildings in the aggregate GHGIT
- If all-electric buildings are included, they must:
 - Meet all reporting requirements
 - Use electric emissions factor set in law



RULE TOPIC: Applying to use Aggregate GHGIT



October 1, 2028

Deadline to submit portfolio for **approval to use for October 1, 2033, compliance.** (COS reviews, corrections if needed)

October 1, 2033

Compliance deadline to meet GHGIT (or Alternative Compliance).



Break for Questions (15 minutes)



Path B: Alternative Compliance Alternate GHGIT



Using the Alternate GHGIT

"Alternate GHGIT" means that a covered building can **start at its** own baseline and set interim targets from that baseline to netzero, with incremental targets reducing 33% (25% if multifamily) for each compliance interval.



Alternate GHGIT for Nonresidential Buildings

Multifamily buildings have one additional compliance cycle to achieve net-zero emissions:

2031-35 GHGIT = (BASELINE GHGI X 75%)

2036-40 GHGIT = (BASELINE GHGI X 50%)

2041–45 GHGIT = (BASELINE GHGI X 25%)

2046–50 GHGIT = Net-Zero Emissions

2036-40 GHGIT = (BASELINE GHGI X 33%) 2041-45 GHGIT = Net-Zero Emissions



Which buildings can use the alternate GHGIT?



Public or nonprofit building portfolios any district campuses or connected buildings



Individual building with >50% of building with no activity type targets (or those defined as "Other")

Note: Per BEPS law, private sector building portfolios are *not eligible for this option!*

Timing for alternate GHGIT:

- Apply to use before 2031–2035!
- Set alternate targets.



Individual building with baseline GHGI emissions 3.5x greater than the standard 2031–2035 GHGIT for the building

Use targets for 2031–2035 and subsequent deadlines.



Alternate GHGIT compared to standard GHGIT

Offers flexibility for...

Campuses or public entities that may be tracking baselines already

- Example "Very High GHGI" Office Building
- Building baseline GHGI = 2.84 (>3.5x standard GHGIT)

- Buildings with uncommon uses that have GHGIs higher than the "Other" target
- \checkmark

Individual buildings with very high GHGIs relative to standard GHGIT Greenhouse ga target (GHGIT)

% emissions required to me

y High GHGI" uilding ne GHGI = 2.84 ard GHGIT)



	Standard (2031–35)	Alternate (2031–35)
as intensity)	0.81	1.90
eduction eet 1st target	71%	33%



RULE TOPIC: Baseline GHGIT Time Periods for Alternate GHGIT

(SMC 22.925.080) **The Director by rule shall** establish the **years and particular 12-month period(s) allowed for baseline GHGIs** used in alternative compliance calculations for covered buildings.

(SMC 22.925.080) For **calculating compliance GHGI** use either:

- **Twelve consecutive months** of verified energy benchmarking data
 - January 1–December 31 or July 1–June 30
- Annual average of 24 consecutive months of verified energy benchmarking data
 - January 1–December 31 or July 1–June 30

*Entities using the District Campus Decarbonization Plan may use 2019 or 2024 and later.

Rule Draft Rule Proposal:

Year: 2024 and later*

Time Periods: Use the same 12-month periods for baseline GHGI as compliance GHGI



RULE TOPIC: Recalculating the Alternate GHGIT

Draft Rule Proposal

Individual buildings eligible for alternate GHGIT

Public or nonprofit building portfolios and campuses

• The gross floor area (GFA) has changed from the baseline year by more than 10%*

*10% aligned with International Performance Measurement and Verification Protocol (IPMVP) guidelines

The gross floor area of the

portfolio has changed from the baseline year by more than 10%*



Path B: Alternative Compliance **Alternative Compliance** Payment (2031-2035 only)



Background and rationale for alternative compliance payment (ACP)

(SMC 22.925.100) "Alternative compliance payment" or "ACP" means a payment that a building owner pays to the City to comply in lieu of meeting GHGITs.

- ACP is included as an **option in the first interval only** (2031–2035) for all covered buildings
- Offers **flexibility** owners not ready or interested in a building upgrade, planning to sell, etc.
- ACP can cover up to 100% of the emissions target enables owner to make partial progress towards meeting GHGIT
- ACP (and fines) at least 40% of the revenue collected prioritized towards emissions reduction in buildings in or serving disadvantaged communities (SMC 22.925.140)



The BEPS Law includes most ACP details:

The greater of:



Calculated payment

A calculation that multiplies the amount of GHG a building emits in excess of its GHGIT by the social cost of carbon (\$190.00 per MTCO₂e)

ACP = total annual MTCO₂e/yr * 5 * cost of MT CO₂e (%/MTCO2e)

Total annual MTCO₂e = [compliance GHGI (kgCO₂e/SF/yr) – GHGIT (kgCO₂e/SF/yr)] * gross floor area /1000



RULE TOPIC: ACP Usage Details in Future Rule!

- ACP payment method will be determined in a future Director's Rule, in advance of the 2031–2035 compliance deadline.
- Building owners may not use the ACP in advance of their 2031–2035 compliance deadline because payment is based on the actual total emissions (MTCO₂e) above the GHGIT at the time of compliance.







Path B: Alternative Compliance Multifamily Prescriptive Path



What is the multifamily prescriptive path?

What the law says...

(SMC 22.925.100) "A building owner **may utilize one or more prescriptive options for a multifamily building in lieu of meeting its GHGIT** during the 2031–2035, 2036–2040, or 2041–2045 compliance intervals. Each prescriptive option shall only be used for one compliance interval." Prescriptive options include:

Replacing existing fossil fuel combustion service **hot water** system(s) with **electric heat pump water heating**



Replacing existing fossil fuel combustion **HVAC heating system** equipment with **electric heat pump systems**



Rationale for multifamily prescriptive path

- **Equitable**: Reduces cost. No need for energy 1. modeling to determine emissions savings
- 2. Flexible: Achieve compliance in a shorter time span because equipment installation can occur up to compliance deadline
- 3. More Straightforward: Reduces some complexity for owners with separate HVAC and **DHW** systems





Sustainabilitv

RULE TOPIC: Proposed application & reporting timeline for multifamily prescriptive path

Step 1: Notify OSE of intent to use **prescriptive path** as part of GHG report (2027–2030)

• Rule Draft: Notify OSE of plan to use

Step 2: Document actions to achieve compliance (beginning in 2031-2035)

 Rule Draft: Allowed documentation to order, paid invoices, photos, and completed SDCI inspection

prescriptive path when submitting first benchmarking verification and GHG report

show work is complete: complete work



Path C: Alternative Compliance Decarbonization **Compliance Plans** Net-Zero and Low Emissions



Decarbonization Compliance Plans

Enables nine additional years from 2041 to meet net-zero or low emissions for largest commercial buildings.

Customizable and flexible for individual buildings:

- Building owners with extenuating circumstances
- Meeting the compliance schedule or meeting the GHGITs is a significant hardship
- Requires demonstration of eligibility, application to use, and an energy & emissions audit.

Two plan options for **Individual Buildings**

• Net-Zero by 2050 Low Emissions by 2050



"Net-Zero" is defined in BEPS Law

Per SMC 22.925.020

"Net-zero emissions" means that all energy sources used by a covered building have zero GHG emissions, including any carbon offsets purchased and retired by a natural gas utility or district thermal energy provider in accordance with and as authorized under the Climate Commitment Act, chapter 70A.65 RCW; and including any renewable energy credits purchased and retired by an electric utility in accordance with and as authorized under the Clean Energy Transformation Act, chapter 19.405 RCW; and except for certain emissions deductions as may be allowed by rule under Section 22.925.120.

End-Use Deductions that Don't Expire

Emergency Fossil Fuel Generators

Emergency Backup Heat in Hospitals and Labs

Fossil Fuel Equipment in Residential Condo Units

Electric Vehicle Charging Equipment

Communications Equipment



Decarbonization Compliance Plan Extenuating Circumstances

NET-ZERO BY 2050

Per BEPS (SMC 22.925.100)...

- 1. Substantial alteration
- 2. Seismic upgrades
- 3. Significant electrical infrastructure upgrades
- 4. Equipment vested under Seattle Energy Code before 2024
- 5. Non-interruptible operations in laboratory or healthcare
- 6. Lease precludes owner access to equipment
- 7. No practicable low and zero GHG emissions alternatives



RULE TOPIC: Plan Application & Extenuating Circumstances Eligibility Criteria

Building owners must apply to demonstrate the building meets an extenuating circumstance to be approved to proceed with a decarbonization compliance plan. The Rule will cover:

- Clarification of Eligibility Criteria (as needed)
- How to Apply: Building owners must submit documentation showing that the building meets the required Extenuating Circumstance
- **Documentation Required:** Varies by circumstance (will we cover some in this webinar!)
- Application Deadlines: Apply to OSE up to three years prior and no later than one year prior (October 1st) to the building's standard compliance deadline in 2031–2035.





1. Substantial Alteration

A **substantial alteration** under Section 307* of the Seattle Existing Building Code will be **undertaken concurrently with building upgrades** necessary to meet a covered building's GHGIT.

* As of 2021 SEC sub alt is now in Section 311! This will be noted in the Rule.

Draft Rule Proposal for Documentation

Stamped permitting record(s) from the Seattle Department of Construction and Inspections (SDCI) showing the scope of alteration and verifying that the planned work meets substantial alteration thresholds.



2. Seismic Upgrades

When **seismic upgrades** for a covered building with unreinforced masonry will be **undertaken concurrently** with building upgrades necessary to meet the covered building's GHGIT.

Draft Rule Proposal for Documentation

Signed and stamped structural engineering report describing the seismic work scope and timeline. Must reference structural code requirements and demonstrating the alterations timing aligns with the owner's decarbonization compliance plan.



3. Significant electrical infrastructure upgrades

When building upgrades necessary to meet the GHGIT include the installation of **significant electrical** infrastructure upgrades to increase electric capacity in the building, such as adding a new transformer vault.

Draft Rule Proposal to Clarify Eligibility Criteria

Allowable electric upgrades that qualify as "significant electrical infrastructure" are as follows

- a vault.

Exception 4.

• A new utility transformer located in the existing building, or an enlargement of the floor area of such

• Trenching across the vehicle lanes of a public way. • The estimated constructed cost (of the electric upgrades) exceeds 50% of the project valuation

These conditions align with the 2021 Seattle Energy Code Chapter 5, 503.4.6



4. Equipment vested under Seattle Energy Code before 2024

When building upgrades necessary to meet the GHGIT would require the replacement of HVAC heating system equipment or service hot water equipment already vested under the Seattle Energy Code by January 12, 2024, and that equipment has not yet reached a defined percentage of life expectancy. Standardized equipment life expectancy and defined percentage of life expectancy shall be established by rule.



RULE TOPIC: Standard EUL and Percent EUL

Draft Rule Proposal

- A Qualified Person must show that the equipment is not yet at 100% of its expected service life and must have been permitted on or before January 12, 2024.
- EUL Reference: Preventative Maintenance Guidebook: Best Practices to Maintain Efficient and Sustainable Buildings ©2010 Building Owners and Managers Association (BOMA) international, Washington, D.C.
 - Note: Commerce is using the same for the WA CBPS standards!
- Rule will also clarify that hotels or healthcare buildings with hot water or steam boilers dedicated to laundry may use this extenuating circumstance.



Abandoned coal-fired boiler in a Seattle building.



5. Non-interruptible operations in laboratory or healthcare

When the building upgrades necessary to meet the GHGIT would require access to a laboratory, or an in-patient or emergency healthcare facility, that **must maintain noninterruptible operations.**



Image: Seattle City Light



6. Lease precludes owner access to equipment

When the owner of a covered building has a tenant lease in place before January 12, 2024, that **specifically precludes owner access to equipment** on which work would be required to meet the GHGIT. This **extenuating circumstance is only available for the 2031–2035 compliance interval.**



7. No practicable low and zero GHG emissions alternatives

When there are no practicable low and zero GHG emissions alternatives available on the market for a necessary function.



Decarbonization Compliance Plan Extenuating Circumstances

LOW EMISSIONS BY 2050

Per BEPS (SMC 22.925.100)...

- Historic buildings
- Net-zero infeasible in low income multifamily
- Distinct limitation of the building precludes structural or electrical capacity upgrade
- Incremental cost of net-zero creates financial distress
- No practicable zero GHG emissions alternative



Law Definition: Low-Emissions Plan Extenuating Circumstance

1. Historic buildings

When building upgrades necessary to meet net-zero emissions would **adversely affect the special features or characteristics of a landmark identified in the designating ordinance or designation report**, or would compromise the historic integrity of a building within a historic district, as determined by either the City's Historic Preservation Officer, or historic board or commission.

Landmarks Map





Law Definition: Low-Emissions Plan Extenuating Circumstance

2. Net-zero infeasible in low income multifamily

When upgrades necessary to meet net-zero emissions in a low-income housing multifamily building are infeasible.

Building must meet 'Housing, low**income'** definition in SMC 23.84A.016 (land use code)

Draft Rule Proposal to Clarify Eligibility Criteria

Income qualified and rent restricted, publicly funded subsidized housing


Law Definition: Low-Emissions Plan Extenuating Circumstance

3. Distinct limitation of the building precludes structural or electrical capacity upgrade

When structural or electrical capacity upgrades necessary to meet net-zero emissions are infeasible due to **distinct technical** and/or physical limitations of the covered building.

Draft Rule Proposal to Clarify Eligibility Criteria

• Electrical capacity upgrades must meet "Significant electrical infrastructure upgrades" per the Net-Zero Plan criteria

• Load study, engineering or architectural evaluation must confirm a technical or physical limitation precludes the structural or electrical capacity upgrades necessary to meet net-zero emissions



Law Definition: Low-Emissions Plan Extenuating Circumstance

4. Incremental cost of net-zero creates financial distress

When a **cost analysis** of the measures necessary to meet net-zero emissions and a property valuation or other business financial analysis, whose content shall be determined by rule, can demonstrate that the incremental cost of meeting net-zero would create financial distress to the building.



Law Definition: Low-Emissions Plan Extenuating Circumstance

5. No practicable zero GHG emissions alternatives

When there are **no practicable zero GHG emissions alternatives** available on the market for a necessary function.



Seattle Office of Sustainability & Environment

Definition of "Low Emissions" for Decarbonization **Compliance Plans**

What we discussed with working groups...

Should "low emissions" be defined and how so?

1. A target can help clarify timeline and goal

- a) Plan required during 2031–2035.
- b) Buildings must meet specified low emissions threshold by 2050 (25 years from now).
- Buildings are expected to meet interim custom targets every 5 years. **C**)

2. Align on a percentage as the "last mile" for emissions reductions (e.g., 90% reduction from baseline)

a) Consider potential exceptions to handle administratively.



"Low Emissions" Plan Options

Draft Rule Proposal

If approved for **a low emissions decarbonization compliance plan**, a qualified person shall develop a plan that achieves one of the following:

- a. A 90% reduction in the building's emissions by 2050 from the building's **selected baseline year**, excepting emissions from end use deductions allowed in 2041-2050.
- b. In select circumstances, a custom low emissions target may be allowed by the Director if the approved extenuating circumstance(s) preclude achieving option "a" Approval for a custom low-emissions target will be conditional pending review of a final updated plan prior to the building's compliance deadline during 2041–2050.





Path C: Alternative Compliance District Campus Decarbonization Compliance Plan



What is a district campus?

(SMC.925.020) "Two or more covered buildings on the same or adjacent parcels owned by the same building owner that is **served by a campus** district heating, cooling, water reuse, and/or power system. Where more than one owner is part of a district campus under a joint agreement, one owner shall be deemed the building owner for the purposes of complying with this Chapter 22.925."









What the **BEPS** law says...

(SMC 22.925.100) "A district campus that can demonstrate through a campus decarbonization compliance plan that upgrades to the district campus plant will generate cumulative emissions reductions from 2028–2050 that are equal to or greater than the cumulative emissions reductions that would be achieved by **meeting** standard or alternate GHGITs may submit a campus decarbonization compliance plan to OSE for approval."





RULE TOPIC: District Campus Plan Requirements

The District Campus Decarbonization Compliance Plan must include:

- **District Campus Description** 1.
- Audits, Studies or Other Plans that informed the Plan (e.g., WA CBPS Plan) 2.
- Total District Campus Gross Floor Area 3.
- Documentation of Baseline Energy Use & Baseline Emissions 4.
- **Documentation of Baseline GHGI** 5.
- Projected Emissions Reductions, Actions and Analysis 6.
- Supporting Documentation 7.



Break for Questions





Thank you!

Visit our website to learn more: seattle.gov/building-emissions-performance-standard

Or email us: <u>CleanBuildings@seattle.gov</u>





