

FEBRUARY 27TH 2025 - MEETING SUMMARY

Focused Meeting on District Campus Decarbonization Plans

Zoom Call 12PM – 1:30PM

Present: Devon Powell, Elija Nerger, Gabriella Henkels, Geoff Glass, Gia Mugford, Jae Lee, Jannette Plunkett, James Witherington, Judith Darst, Morgan Heater, Rose Ann Lopez, Sarah Moore, Steve Abercrombie, Wes Hoppler, Yolanda Cieters

City of Seattle BEPS and Facilitation Staff: Gemma Holt, Nicole Ballinger, Kyle Berbel and Sandra Mallory (OSE), Anna Kelly, Michael Baker, and Catherine Ozols (SBW), Kirstin Pulles and Sepideh Rezaia (Unrooz)

Meeting slides are posted at: <https://www.seattle.gov/environment/climate-change/buildings-and-energy/building-emissions-performance-standard/beps-rulemaking>

Agenda:

Topic	Time
Welcome + Introductions	5 mins
Review: Introduction to the BEPS Rulemaking Process	10 mins
Review: Introduction to District Decarb Plans	10 mins
Discussion about Participant District Campus Systems	15 mins
Discussion: District Campus Decarbonization Plan Requirements	35 mins
Wrap-Up & Next Steps	5 mins

Working Group Discussions Summary:

1. Introduction to the BEPS Rulemaking Process.

Topic: The BEPS ordinance was shaped by many stakeholders, including the HDC Affordable Housing Study and Task Force, a Technical Advisory Group, building owners, residential and small business tenants, labor and trades, and public open houses.

The policy was developed in 2022 and 2023 with program development through 2026. The Director's Rule is currently in development and will be published by mid-2025. The rulemaking process includes a facilitated Technical Rulemaking Workgroup, focused topical meetings on key topics, and public webinars. The rules will also be updated periodically with stakeholder engagement through 2044, including GHGITS, emissions factors, and penalty amounts.

In 2027-2030, Benchmarking Verification and a GHG Report will be required while building owners begin planning for emissions reductions. Beginning in 2031, building owners will move through multiple compliance cycles. Every five years, building owners will need to verify the building's energy use (Benchmarking Verification), submit a GHG Report, and meet a Greenhouse Gas Intensity Target (GHGIT).

Building owners have three pathways available to them for BEPS compliance. Path A is to meet the Standard GHGIT or building portfolio/campus GHGIT in all five-year compliance intervals. Path B is to receive either an extension or alternate compliance through the Alternative Compliance Payments (ACP), the multifamily prescriptive path, or an Alternate GHGIT (a custom percentage reduction target). Path C is to follow a custom timeline and/or target due to hardship or unique circumstances via a net-zero or low-emissions decarbonization compliance plan. Path C also includes district campus decarbonization plans.

The Rulemaking goals, process, and timeline for the first Director's Rule and subsequent Rule updates were also shared.

Discussion:

A participant inquired about the status of the City's evaluation of Initiative 2066. OSE responded that there is no update at this time. They have been advised to continue the rulemaking process while legal process plays out. Another attendee asked if the Alternative Compliance Payment (ACP) costs are still in draft form and will be updated for the first compliance interval. OSE explained that the ACP may be updated for inflation and potential revisions to the social cost of carbon in the first cycle, but such changes would not occur until the next round of rulemaking.

2. Introduction to District Decarbonization Plans.

Topic: The BEPS Ordinance (SMC 22.925.100) states "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.”

The Ordinance (SMC.22.925.020) defines a district campus as “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.”

The first column of this table outlines what information is required for district decarbonization plans by both Washington’s Clean Building Performance Standard (CBPS) and Seattle’s BEPS. The second column is data that only Washington’s CBPS requires, and the third is data that only Seattle’s BEPS requires (either per the ordinance or pending final Rule):

	WA & Seattle Data	WA CBPS (EUIt) Data	Seattle BEPS (GHGIT) Data
General Campus Requirements	ENERGY STAR Portfolio Manager data, GFA, energy use for 12 months, list of connected buildings.	Parcel numbers, WA-specific IDs, Form J (certifications).	Ownership docs, mechanical equipment inventory, GHGIT compliance details.
Benchmarking	WNEUI, measured EUI, energy source breakdown.	EUIt calculation (Form B), compliance pathway selection.	Baseline GHGI, GHGIT compliance calculations, end-use deductions.
Decarbonization Plans	Existing system description, proposed upgrades, compliance schedule.	Detailed plan (Form K), fossil fuel replacement, LCCA (if applicable).	Actions to meet GHGITS, compliance documentation
Reporting Timelines	5-year progress updates starting 2025.	Final plan due June 30, 2025; reports every 5 years until 2040.	Reports every 5 years until 2050

Compliance Metrics	Aggregated campus-level energy use data.	EUI or investment criteria compliance.	GHGIT compliance
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3. Discussion about Participant's District Campus Systems

Topic: The attendees were asked to answer the following questions about their district campus systems to provide OSE with more information about the different types of district campuses:

1. How many buildings are served by your district campus?
2. How many buildings on the district system are also served by utility metered gas?
3. Are you considering allowing adjacent buildings not under your ownership to hook into your newly decarbonized system (i.e. adding an ecodistrict)?
4. How are you currently tracking emissions?
5. Briefly describe your decarbonization timeline.
6. What is your final decarbonization goal (e.g. meet CBPS requirements, fully decarbonize, etc.)?

Some participants provided this information via a survey in advance of the meeting. OSE reviewed these results and asked follow-up questions about some of the findings.

Discussion:

A participant asked whether all buildings are benchmarking their energy use, as ESPM should provide greenhouse gas (GHG) information. Another attendee shared that while they use ESPM to track energy volumes, their carbon tracking is done separately in a spreadsheet to incorporate specific emissions factors. OSE confirmed that ESPM does not use the City's local emissions factors.

Another attendee explained that the Clean Buildings Performance Standard (CBPS) requires consideration of expansion but not actual expansion of district energy systems (DES) to additional buildings. OSE clarified that the BEPS ordinance does not require expansion either, but gathering such information provides a broader understanding of different building owners' plans.

An attendee shared that only three of their buildings there have direct gas service in addition to central utility service. Vendors may use gas for cooking, and some tenants have added spot conditioning with direct gas. Another participant noted that some of their buildings have separate domestic hot water meters. They emphasized that a holistic decarbonization plan should include refrigerant regulations, as well as heating and domestic hot water systems. Another attendee shared that they use cooking gas in dining facilities and lab gas in education buildings. A final respondent explained that

they typically have dedicated natural gas meters for cooking and central thermal systems (purchased steam or natural gas) for heating.

4. District Campus Decarbonization Plan - Data Requirements

Topic: The participants were introduced to the proposed requirements for District Decarbonization Plans under BEPS. These requirements build on the requirements for decarbonization plans specified in the BEPS ordinance.

Per the BEPS Ordinance (SMC 22.925.100), all decarbonization plans must include:

- Building [district campus level] energy and greenhouse gas emissions audit
- Analysis of energy efficiency greenhouse gas emissions reduction actions [at the plant level and in any buildings or collection of buildings that have a fossil fuel utility meter]
- Incremental and final GHGIs and actions at each compliance interval [for the district campus]
- Any applicable content specified by decarbonization plan provisions in the Seattle Energy Code
- Cost analysis for achieving the incremental and final GHGIs for each compliance interval covered by the plan, including:
 - Incremental cost of any equipment or other upgrades needed to meet the GHGI above standard asset replacement costs or business-as-usual conditions
 - The analysis must include the social cost of carbon, utility cost savings, available grants, incentives, tax deductions or other financial incentives
 - [The analysis should focus on the decarbonization of the system]

The proposed BEPS Director's Rule outlines that District Campus Decarbonization Compliance Plans must include the following components:

1. District Campus Energy and Emissions Benchmarking Data
2. Documentation of Baseline Energy Use
3. Documentation of Baseline Emissions (GHG and GHI) of the District Plant and Campus Buildings Served by the Plant
4. Demonstration of Cumulative Emissions Reduction
5. District Campus Decarbonization Schedule
6. Supporting Documentation

The proposed draft requirements for each numbered item are detailed below.

1. District Campus Energy and Emissions Benchmarking Data

In ESPM, identify all buildings connected or planning to connect soon (e.g., new construction) to the district campus energy system and energy meters, including:

- Each covered building > 20,000 SF (include >20,000 SF w/ BEPS Exemptions)
- Central plant structures/buildings

- Total GFA of buildings not covered or < 20,000 SF

2. *Documentation of Baseline Energy Use*

Calculate district campus baseline energy use (January 1 to December 31 for 2024 or later) for all fuels (electricity, natural gas, bulk fuels, & thermal imports). Note any:

- Allocations for allowed end-use deductions
- Energy exports (e.g., co-generation electricity sold to the grid)
- Energy used by exempted buildings or structures not covered by BEPS

3. *Documentation of Baseline Emissions (GHG and GHGI) of the District Plant and Campus Buildings Served by the Plant*

1. Total District Campus Gross Floor Area (GFA) Measurement
 - a. Sum of GFA of each building connected to the district system.
2. Baseline Emissions (GHG) Calculation
 - a. District campus baseline emissions = sum of emissions from all fuel sources.
 - b. Document end-use deductions that apply to the district energy.
3. Baseline GHGI Calculation
 - a. $\text{GHGI} = \text{GHG} \text{ divided by total district campus GFA.}$
4. Fossil Fuel Utility Metered Consumption (building level)
 - a. Any building(s) on district energy that also have a fossil fuel utility meter:
 - i. Include energy use as a subtotal in the plan (electric meters may be excluded).
 - ii. Apply allowed end-use deductions for each compliance period.
 1. These emissions must be decarbonized as part of the district campus plan but are allowed until the end-use deduction expires.

4. *Demonstration of Cumulative Emissions Reduction*

1. Establish compliance period targets using aggregate standard or alternate GHGIs (baseline to target).
2. Calculate cumulative compliant emissions and estimate baseline emissions for each compliance period.
3. Demonstrate cumulative reductions will be equal to or greater than those achieved by meeting aggregate standard or alternate GHGIs.

Data Requirements Discussion:

A poll was launched to assess whether attendees are already collecting the data that OSE proposes to collect. Five out of six respondents indicated that they are.

One participant commented that in 2041, the standard path shows more avoided

emissions temporarily. They noted that this is likely to occur because new district energy infrastructure will be built over time, causing emissions reductions to be non-linear. They expressed concern about potential fines during periods when emissions appear higher before alignment with targets. OSE clarified that with a custom path, the timeline to meet the target is set by the participant, so fines would not be imposed for temporary fluctuations. Another attendee asked for clarification on whether the expected 33% reduction must occur within a compliance interval or if the interval itself is also customizable. OSE confirmed that the interval is customizable, and that compliance will be assessed against the participant's own timeline.

One participant described a typical decarbonization approach, where early investments focus on reducing energy use before switching to a heat pump plant. They noted that this model does not always align with a standard compliance timeline and suggested that district campuses should be evaluated based on their own merit. An attendee asked for clarification on whether committing to a custom path means they will no longer be assessed against the standard path. OSE confirmed that targets are based solely on the custom path.

Someone raised concerns about balancing flexibility in implementation with accountability, particularly given competitive public funding cycles. They sought clarification on the implications of a two- to four-year delay in cycle funding. Another attendee asked whether a custom plan can be revised as long as cumulative emissions reductions remain compliant or whether it must be adhered to strictly. OSE acknowledged that campuses are not static and that revisions may be necessary. They confirmed that updates would be accepted every five years to accommodate changes.

Another participant agreed that emissions reductions for district steam will be gradual at first, with a steeper decline once conversions begin. They emphasized the importance of long-term planning and hybridizing transitions to prepare downstream systems. Another attendee highlighted multiple opportunities to reduce emissions within steam-based district energy systems. They suggested that envelope improvements, full variable volume water and air-side distribution, demand-controlled ventilation, and heat recovery should be prioritized before decarbonizing central utility plants.

One participant emphasized the importance of aligning reporting with State requirements to reduce administrative burdens and maximize funding for upgrades.

5. District Campus Decarbonization Plan - Reporting Requirements

Topic: OSE continued to outline the six proposed requirements for District Decarbonization Plans under BEPS, with this section focusing on reporting requirements.

5. District Campus Decarbonization Schedule

1. Provide schedule for decarbonizing the district energy system, including improvements made since baseline and planned work.
2. Include timeline & projected emissions reductions from planned improvements.
3. Include a summary of known project risks and contingency plans.

6. *Supporting Documentation*

1. Names, qualifications, and responsibilities of key staff or contractors managing the plan.
2. Results from audit(s) conducted within five years of the baseline (or new audit).
3. Map of connected buildings & planned future connections.
4. Reference key related plans (e.g., WA CBPS Plan, campus sustainability plan, etc.)
5. Seattle Energy Code future decarbonization plan (if applicable)*

Progress Reporting Requirements

- Per BEPS ordinance, building owners that are reporting as a district campus and connected buildings will be required to comply mid-cycle (e.g., by Oct. 1 2028, 2033, 2038 and so on)
- Report on incremental progress every five years, including:
 - Key project milestones and emissions reduction achieved
 - Progress on cumulative emissions reductions
 - Document baseline emissions and actual emissions reductions achieved during each compliance period.

Discussion:

A poll was launched to gauge attendees' support for the proposed reporting requirements. Most responses were 4s and 5s, with one 2 and one 3.

One participant who rated the proposal a 2 explained that the plans need specificity regarding decarbonization measures. They stressed the importance of detailing interrelated elements, beyond energy audits, to ensure a comprehensive schedule. OSE acknowledged this concern and emphasized that plans must specify the measures that will achieve decarbonization. They also noted that some actions demonstrating progress may have limited emissions impact but are still valuable.

Some attendees asked whether reporting requirements could be reduced after demonstrating compliance in the first compliance period, or after the first cycle. OSE noted that reporting dates are set within the ordinance but agreed to consider ways to minimize reporting burdens. They suggested that once a building is on track with its plan, only minor updates may be needed.

Participants expressed concerns that their early demand reduction efforts could make meeting the first target more difficult if the baseline year is 2024, and that they would prefer a 2019 baseline year. They asked whether their baseline should be adjusted and whether the expectation was initially to meet a target by 2030. OSE explained they will

consider the request for a 2019 baseline. 2024 was recommended to avoid distortions from COVID-era data. They also confirmed that previous efforts will be considered in setting targets.

Organized by:



Facilitated by:



Technical analysis by:

