

Seattle Building Emissions Performance Standard

Guide to the Proposed Policy (01/17/23 DRAFT)

Seattle’s proposed Building Emissions Performance Standard (BEPS) for larger existing buildings establishes carbon emissions targets that buildings must meet over the next two to three decades. The policy is projected to reduce building emissions 27% by 2050, making it the most impactful climate action Seattle can take now.

The BEPS proposal is designed to provide flexibility and a long runway. The approach incorporates:

- An emissions reduction requirement to ensure we are on track to achieve Seattle’s goal to eliminate climate pollution from Seattle’s largest buildings.
- Compliance flexibility and support for all owners, as well as dedicated financial assistance to ensure buildings serving frontline communities benefit from better performing facilities while mitigating for potential cost burdens on owners and tenants.

The proposed BEPS policy is forecasted to create 150 to 270 new well-paying jobs annually, benefitting Seattle area workers, our local economy, and expanding career opportunities for women, people of color, and women/minority-owned businesses (WMBEs).

Seattle’s BEPS builds on the successful foundation the City has established with [Energy Benchmarking & Reporting](#) since 2011 and with [Building Tune-Ups](#) since 2019. BEPS is an opportunity to refine these existing programs into a coordinated outcome-based approach for buildings over 20,000 square feet (SF) that equitably transitions them to cleaner energy.

Proposed Regulations

The Seattle BEPS complements [Washington State’s Clean Buildings Energy Performance Standard](#), which regulates energy use in existing buildings. The State Standard is important for energy efficiency, but its current energy targets would only reduce Seattle building emissions by about 4% by 2030. Seattle’s BEPS fills this gap with these building owner requirements:

- Verify energy and emissions data reported to the Benchmarking Program to ensure accuracy.
- Meet greenhouse gas intensity (GHGI) emissions targets that will be phased in by building size and type, or achieve alternative compliance options, during the first three compliance intervals.
- Document current emissions performance, building equipment, and actions needed to achieve subsequent GHGI targets.
- Achieve net-zero emissions by 2050 or earlier, depending on building size and type.

The proposal will also sunset Building Tune-Ups after its 2023-2026 compliance interval to reduce overlap with the State Standard, which has an operational requirement that is similar to Tune-Ups.

Who Does this Regulation Apply To?

This proposal covers existing nonresidential & multifamily buildings greater than 20,000 square feet in size, excluding parking. In Seattle, this is about 1,650 nonresidential buildings, largely downtown and in dense neighborhoods, like high and mid-rise offices, hotels, schools, large warehouses, and retail, and about 1,885

multifamily buildings (typically those with about 20 units on average or more). About 720 large buildings on campuses like colleges or hospitals are also covered. This applicability is consistent with:

- Buildings that already must comply with Seattle [Energy Benchmarking & Reporting](#).
- The WA Clean Buildings Energy Performance Standard, which applies to:
 - Commercial >50,000 SF. Required to meet first energy targets 2026-2028.
 - Commercial >20,000-50,000 SF & Multifamily >20,000 SF. Required to submit energy reports and energy management plans beginning in 2027, and to meet energy targets (TBD) after 2030.

Emissions Performance Targets

The proposed BEPS includes standard greenhouse gas intensity targets (GHGITs) for 21 building activity types (e.g., office, retail, multifamily) for each compliance interval until net-zero emissions. The BEPS proposal sets required GHGITs through 2035 and provisional targets from 2036 - 2050 to enable owners to plan, while allowing the later targets to be revised, if needed, by future rules updates.

- Building emissions will be measured based on greenhouse gas intensity (GHGI) in kgCO₂e/SF/year. This is calculated based on weather-normalized energy used in the building multiplied by the emissions factor for each energy source.¹ GHGITs may also be normalized for hours of operation and multifamily occupancy density.
- The standard GHGITs for building activity types were calculated by using an average 2019 baseline by building type. Each compliance interval target is a 25% reduction from the baseline average.²
- GHGITs for multi-use buildings will be calculated based on a pro-rated mix of spaces.

Timing & Requirements

The timeline is designed for early action in the largest nonresidential buildings – those with the greatest emissions impact. Building size cohorts are consistent with the State energy standards since building owners are already preparing to comply with that law. Smaller nonresidential and multifamily buildings have a longer runway, which allows greater flexibility and time for growing technical assistance and financial incentives. Each five-year compliance interval begins with the largest buildings and ends with the smallest as follows:

Year 1	Year 2	Year 3	Year 4	Year 5
>220,001 SF	90,001 - 220,000 SF	50,001 - 90,000 SF	30,001 - 50,000 SF	20,001 - 30,000 SF

Compliance deadlines will also be phased in by building type, starting with nonresidential, followed by market-rate multifamily, and then low-income multifamily. In each subsequent interval, buildings are required to meet progressively lower emissions targets.

2022 - 2026	2027 - 2030	2031 - 2035	2036 - 2040	2041 - 2045	2046 - 2050
Policy/Program Development	Nonresidential Emissions Targets			Net-Zero Targets	
Building Owners Get Ready	Multifamily Emissions Targets*			Net-Zero Targets	

*Affordable housing exempt from meeting 2031-2035 targets.

¹ Emissions factors are a numerical value that represent the relative greenhouse gas impact of energy sources like electricity, gas, and stream, expressed in kgCO₂e/kBtu. The BEPS proposal establishes emissions factors for 2019-2030 and details the process and sources to update the factors for each compliance interval.

² For more about target setting analysis, watch: [Draft Emissions Targets for Seattle Building Performance Standards - October 25, 2022](#), or review the *Seattle BPS Targets Analysis Memo Appendix* in the *BEPS Director's Report*.

Flexible Ways to Comply

In response to discussions with stakeholders, the BEPS policy has flexible ways to comply, called “alternative compliance” as well as certain exemptions and extensions. These are designed to accommodate buildings of various uses, size, type, ownership, age, and systems, and to address when technologies are not currently at market scale for certain uses, like commercial cooking.

Alternative Compliance

- Nonresidential first interval 10% emissions reduction
 - For 2027-2030 only, if the emissions are more than 10% above target, can reduce emissions only 10% in lieu of meeting target.
- Alternative compliance payment in lieu of emissions reduction
 - Payment based on social cost of carbon, for emissions exceeding compliance target for situations where delaying emissions reduction in the building makes sense for a building owner.
 - Limited to 2026-2030 and 2031-2035 to allow for owner timing but still ensure future action.
 - Funds will be directed to technical and financial assistance for reducing emissions in under-resourced buildings.
- Building Portfolio/District Campus/Jointly Metered Buildings: target applied in aggregate
 - Aggregate targets based on pro-rated building activity types or custom targets.
 - Portfolio: multiple buildings with the same long-term owner (public entity or non-profit).
 - District campus / jointly metered: multiple buildings on district system or sharing energy meters.
- Custom targets for buildings meeting certain criteria or building types not covered by standard targets.
 - Building’s own baseline is used to establish 25% GHGI reduction target for each interval.
 - For buildings without a target, emissions 3.5 times greater than standard target, or for portfolio or district campus.
- Equipment upgrade (prescriptive) options for multifamily in lieu of meeting target to streamline.
 - Transition certain equipment, e.g., replace gas hot water with electric heat pump.
- Hardship compliance plans for significant extenuating circumstances, such as:
 - Substantial alteration, unreinforced masonry, city landmark historic building, electric service capacity constraints, district campus central plant upgrade, or for when no practicable low or zero GHG emissions alternatives are available on the market for a necessary function.

Exemptions, Extensions, and Deductions

Exemptions for certain buildings, such as:

- Scheduled to be demolished
- All electric energy sources

Extensions for certain buildings, such as:

- New construction
- Financial distress
- Publicly subsidized low-income housing and unsubsidized low-rent housing

Opportunity to deduct certain equipment from emissions reporting, such as:

- Fossil-fuel equipment permitted under the 2018 Seattle Energy Code (2027-2030 only)
- Commercial cooking equipment (2026-2030 & 2031-2035 only)
- Electric vehicle charging
- High-intensity process equipment in hospitals, laboratories & hotels (2026-2030 & 2031-2035 only)
- Emergency power back-up generation and emergency heating in hospitals or laboratories

Penalties for Noncompliance

While The City of Seattle will encourage robust compliance through engagement and support as it has done with the Benchmarking and Tune-Ups policies, non-compliance carries a penalty of \$2.50/square foot. Flat fines of

\$5,000 and \$2,500, depending on building size, may also be assessed for failure to report and inaccurate reporting. The Director has authority to mitigate fines.

Support and Financial Assistance

Support for all owners and tenants of covered buildings will include:

- Fact sheets and guidance outlining financial resources such as, utility incentives, federal tax incentives, WA Clean Buildings early adopter incentives, WA C-PACER, and other financing
- Outreach and materials like tools and case studies to understand and calculate emissions
- Phone and email consultations
- Training and informational workshops

Seattle Clean Buildings Accelerator

Launched in 2022, the [Seattle Clean Buildings Accelerator](#) is a no-cost support and training program for building owners and managers to meet [WA Clean Buildings](#) requirements and reduce emissions. It includes self-led education for all audiences, and light coaching prioritized for buildings that serve or are in BIPOC and frontline communities.³ The adopted 2023 and endorsed 2024 budgets include funding to support program expansion with a new full-time position to grow the Accelerator into a robust resource hub that can reach more buildings and \$400K/year for consultant to support and coach program participants.

Capital Investments & Engineering: \$8.8 Million Already Committed Through 2024

- **\$520K** in AARA loan funds reallocated for affordable housing decarbonization.⁴
- Awarded **\$1.8M** U.S. Department of Energy grant for decarbonizing affordable housing.
- Green New Deal 2022 Opportunity Fund: **\$2M** for multi-family affordable housing electrification.
- A new position shared by the Office of Housing and Office of Sustainability, beginning Q1 2023, to support housing providers to reduce buildings emissions and seek additional project funding.
- The 2024 budget includes **\$4.5M/year** for in-depth engineering design and capital support for non-profit and affordable housing buildings serving low-income and BIPOC communities.
- City departments are coordinating to pursue federal infrastructure funds, inflation reduction act funds, and other opportunities.

Supporting an Inclusive Clean Energy Workforce

Seattle's Building Emissions Performance Standards is estimated to generate 150-270 annual market driven jobs in the clean energy economy, increasing demand for electricians and heating and cooling (HVAC) refrigerant workers and providing the opportunity to expand career paths for women, BIPOC, and women/minority-owned businesses (WMBEs). City action and investment to date includes:

- **\$1.8M** awarded in 2022 for workforce development in clean energy jobs and construction training.
- New position created in the Office of Economic Development for a Green Economy Advisor and the city is establishing a cross-departmental Clean Energy Workforce Committee.
- The adopted 2023 budget also includes:
 - A new position in the Office of Sustainability and Environment, beginning 2023, for a Climate Workforce Development Advisor to advance workforce development in clean energy.
 - **\$1M/year** for pre-apprenticeship and job readiness programs for clean energy careers.

³ BIPOC and frontline communities include black people, Indigenous people, sovereign tribal nations, communities of color, immigrants, refugees, youths, elders, houseless people, disabled people, LGBTQ+ people, people with low and no income, and people who work in outdoor occupations.

⁴ AARA refers to the 2009 American Recovery and Reinvestment Act.