

Seattle's Brand-New Building Emissions Performance Standard: What You Need to Know Now

HOSTED BY THE LIGHTING DESIGN LAB

NICOLE BALLINGER, BUILDING EMISSIONS PERFORMANCE STANDARD PROGRAM MANAGER
OFFICE OF SUSTAINABILITY & ENVIRONMENT

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City of Seattle

What's on Tap Today

Part 1: Seattle BEPS Background

- Why this policy?
- Benefits

Part 2: Seattle BEPS Requirements

- Requirements
- Compliance Timeline

Part 3: Pathways to Compliance

- Paths A, B and C
- Penalties

Q & A Break: Clarifying Questions

Part 4: Net-Zero Emissions Examples

Part 5: Estimate a Building's Greenhouse Gas Intensity (GHGI) & GHGI Target

- Benchmarking Map
- Calculate a Building's Estimated GHGI and GHGIT

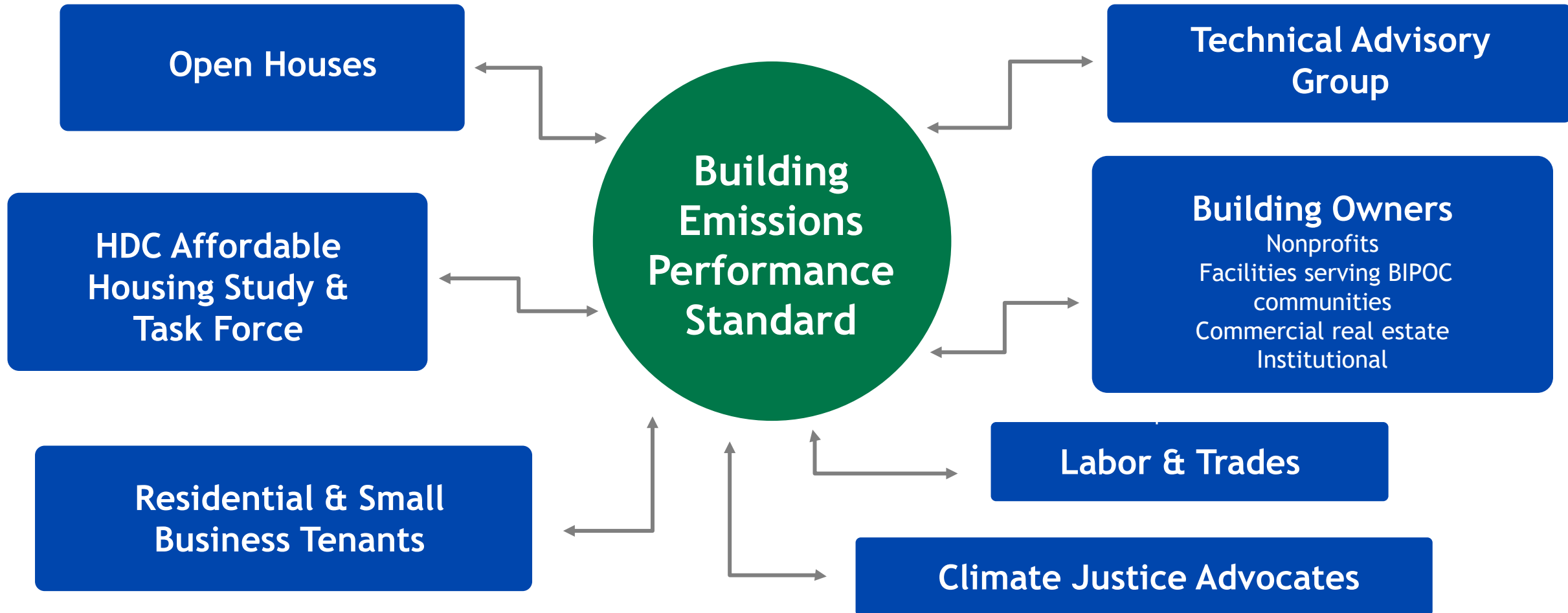
"The Building Emissions Performance Standards (BEPS) policy continues Seattle's leadership on climate action and represents a milestone for our city's efforts to reduce greenhouse gas emissions and build healthy communities," said Mayor Bruce Harrell.

"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*

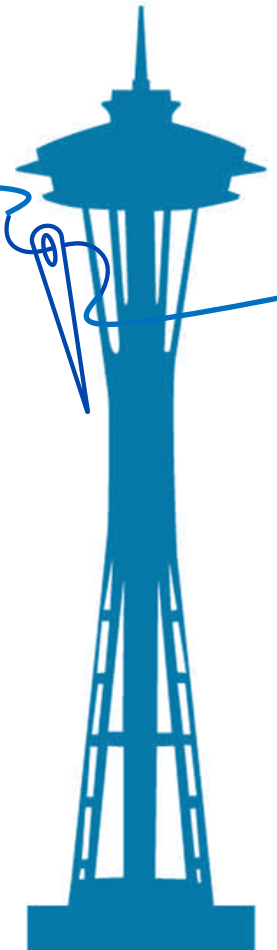


Many voices helped shape this policy



Policy addresses multiple priorities

Climate crisis and pollution
Environmental justice
Downtown revitalization
Equipment life cycles and market signals
Workforce and a just transition
Affordable housing and human services
City-owned building portfolio



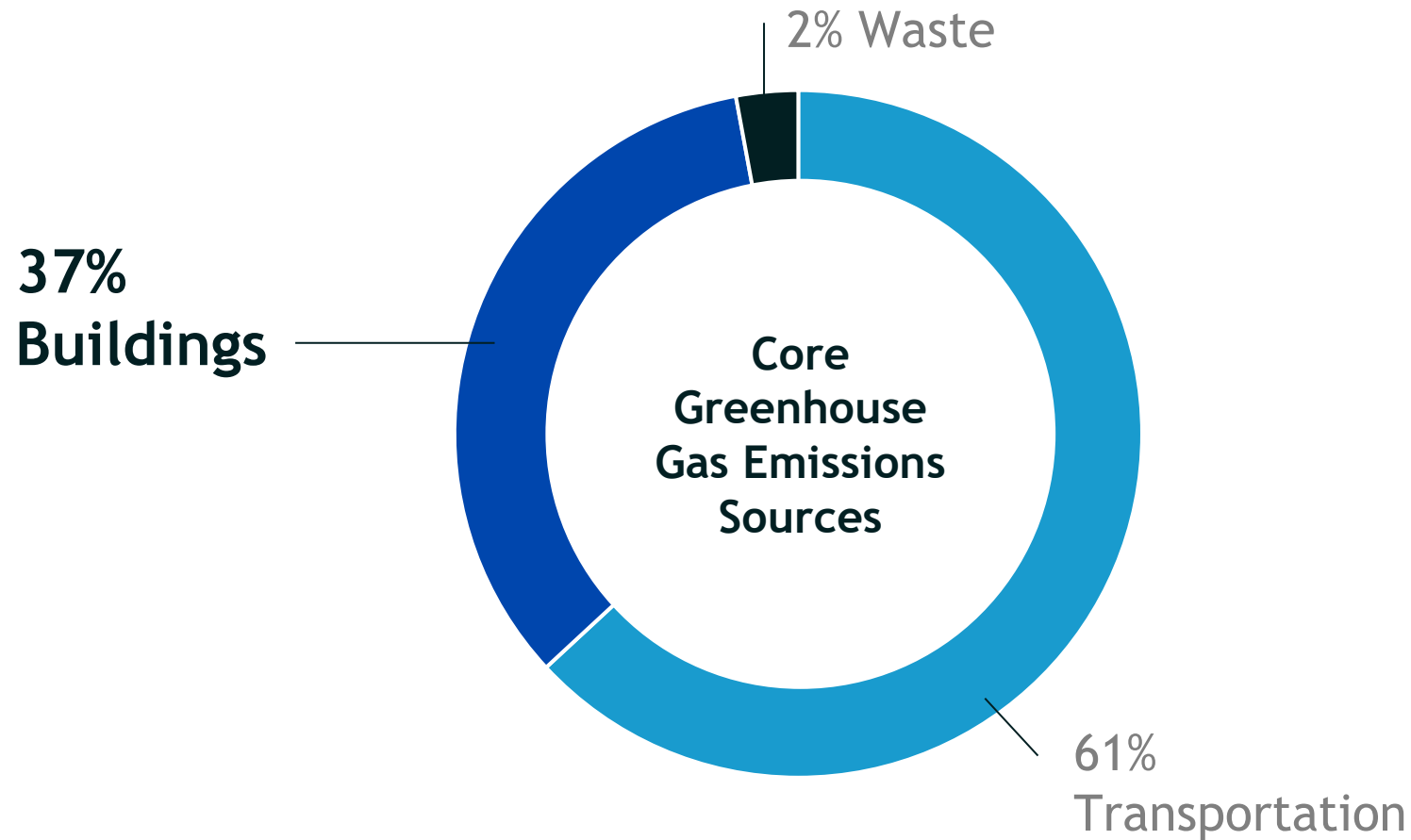
What is a Building Performance Standard (BPS)?

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

Decarbonization - another word for reducing emissions.

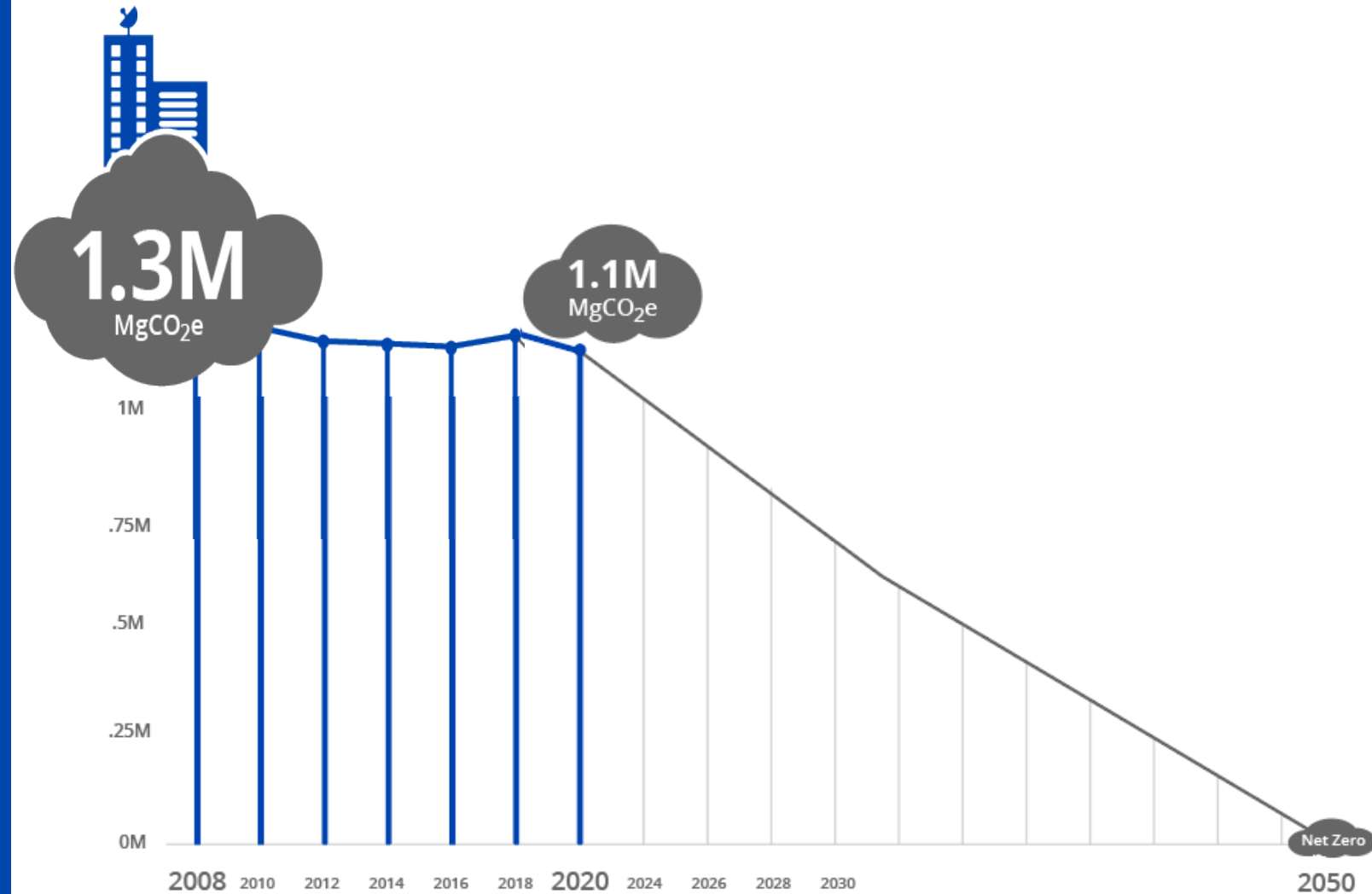


Buildings are one of the largest sources of Seattle's climate pollution

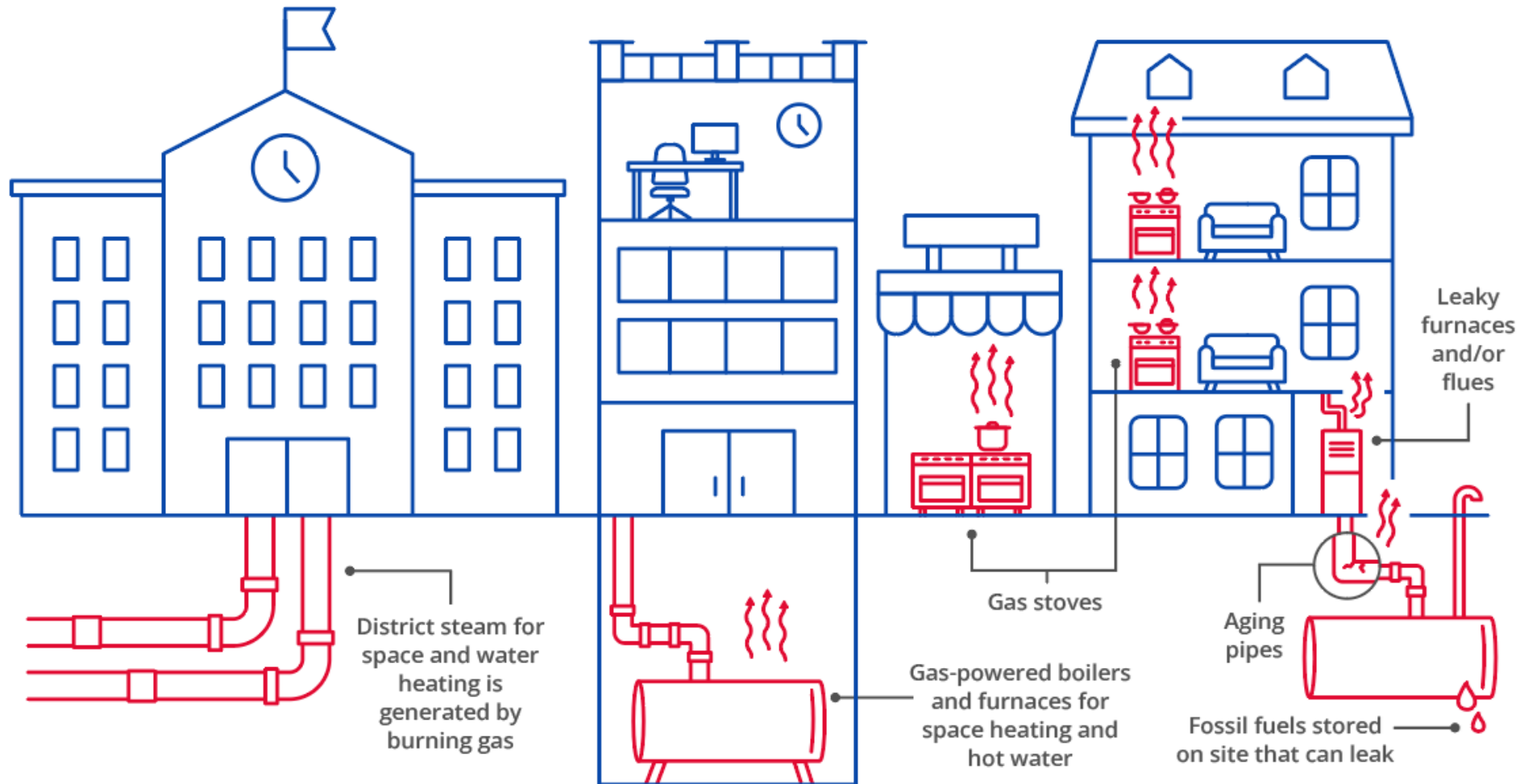


Source: 2020 Seattle Greenhouse Gas Emissions Inventory

Bold action is needed to significantly reduce climate emissions from buildings



Building-related emissions mostly come from burning fossil fuels, like gas and oil



BEPS is one of the most effective actions we are taking.

BEPS is projected to:

- **Reduce greenhouse gas emissions by about 325,000 metric tons by 2050** from existing large buildings.
- Or **27% decrease in building related emissions** from a 2008 baseline.
- Or the equivalent **72,322 gasoline-powered cars taken off the road** for a year.



Benefits of emissions-based building performance standards and energy efficiency



Greater efficiency can
mean cost savings for
owners and tenants



Improved comfort



New well-paying jobs in
clean energy and
energy efficiency



Safer communities —
reduced risk of gas
leakage, accidents, and
contamination



Cleaner air indoors
and outdoors



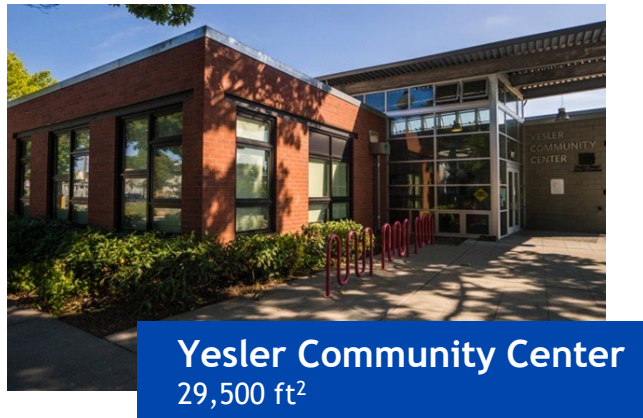
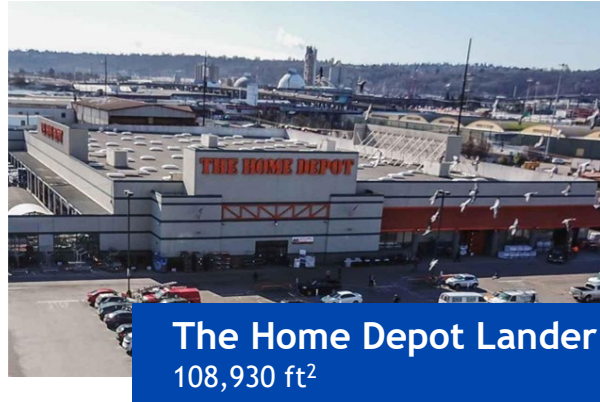
Lower carbon
emissions



Part 2

Seattle Building Emissions Performance Standard Requirements





Covers about 4,100 Nonresidential & Multifamily Existing Buildings >20,000 square feet



(Buildings not included: new construction (covered by Energy Code), industrial/manufacturing, small commercial and multifamily, single-family)

What does BEPS Require of Building Owners?

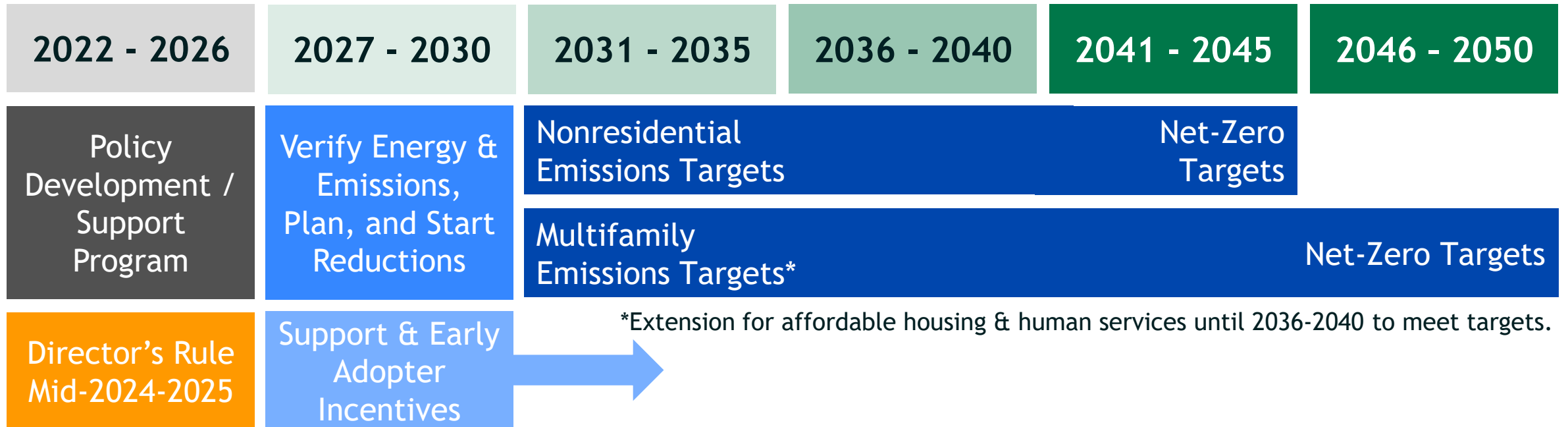
Every 5 years:

-  **Energy benchmarking verification:** Verify previous year's building energy use and GHG emissions (Energy Benchmarking Verification)
-  **Report emissions performance and plan:** Document current performance & equipment, and actions to achieve targets
-  **Meet Greenhouse Gas Intensity Targets (GHGIT):** Three pathways
-  **Achieve:** Net-zero emissions (with narrow exceptions) by 2042-2050 (depending on building type and size)

Building Tune-Ups will sunset after its 2023-2026 compliance cycle is done.

What's the Timeline for Compliance?

Seattle Building Emissions Performance Standard (BEPS)



State of WA Clean Buildings Performance Standard

2026 - 1st Energy Targets
Commercial >50K

2031 >> Future Energy Targets - To be Determined by Rule
Commercial & Multifamily >20K

What are the initial Seattle BEPS deadlines? (2027 – 2030 and 2031 -2035)

By October 1 st of Year Listed	Verify & Report	Verify, Report & Meet GHGI Target
>220,001 SF	2027	2031
90,001 to 220,000 SF	2027	2032
50,001 to 90,000 SF & campus, portfolios and connected buildings	2028	2033
30,001 to 50,000 SF	2029	2034
20,001 to 30,000 SF	2030	2035

Who is qualified to report for BEPS?

Qualified Person: means a person having training, expertise, and at least three years professional experience in building energy use analysis and any of the following certifications or licenses:

- **Licensed professional architect or engineer** in the State of Washington
- **Building Energy Assessment Professional (BEAP)** certified by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
- **Certified Energy Auditor (CEA)** certified by the Association of Energy Engineers (AEE)
- **Building Operator Certification (BOC)** Level II by the Northwest Energy Efficiency Council
- **Certified Commissioning Professional (CCP)** who is certified by an ANSI/ISO/IEC 17024:2012 accredited organization
- **Certified Energy Manager (CEM)** in current standing certified by the Association of Energy Engineers (AEE)
- **Energy Management Professional (EMP)** certified by the Energy Management Association.

WA CBPS & Seattle BEPS Requirements Comparison

	WA CBPS (2019)	Seattle BEPS (Dec 2023)
Performance Target	Energy (EUI _t) <i>kBtu/sf/yr</i>	Emissions (GHG _{IT}) <i>co2e/sf/yr</i>
Covered Building Sizes	>20,000 SF ¹	
Building Types	Nonresidential & Multifamily	
Requirements	Reporting: Operations & Maintenance and Energy Management Plans Target: Meet EUI _t (NR >50K SF)	Reporting: Benchmarking Verification and GHG Report Target: Meet GHG _{IT}
1st Reporting Deadline	2026-2028 (all)	2027-2030 (all)
Meet 1st Target Deadline	2026-2028 (NR >50K SF)	2031-2035 (all)

1 – WA “Tier 2” buildings (MF >20K SF and NR >20-50K) reporting reqs. only.

WA CBPS & Seattle BEPS

Requirements Comparison (cont.)

	WA State CBPS	Seattle BEPS
Alternative Compliance?	Yes	Yes
Who can report?	Qualifications allowed are same	
Free technical support?	Seattle, Puget Sound Energy, SnoPUD “Accelerators”	
Incentives for early compliance?	Yes	Planned
Penalties	\$1/SF ¹	Up to \$10/SF ²

1 – For 18 months.

2 - \$10/SF for nonresidential; \$7.50/SF for multifamily; \$2.50/SF low-income multifamily.

A large, multi-story brick building with many windows, an American flag on top, and cars parked on the street.

Part 3

Pathways to Compliance for Seattle BEPS

Three compliance pathways for greatest flexibility

PATH A:

Meet standard or portfolio GHG emissions targets at each five-year compliance interval



Compliance includes:

Measure Energy & Emissions
Energy/Emissions Reduction Planning
Meet Targets
Achieve Net Zero by 2041-2050

PATHS A & B:

Early Adopter Incentives
and Technical Support

PATH B:

Small variances but overall can meet compliance with modifications.



Extensions:

Get a bye on one or more compliance intervals before returning to Path A

End Use Deductions:

Meet Path A with certain emissions deductions (e.g. restaurant cooking)

Compliance Payment:

Payment in lieu 2031-2035; revenue supports under-resourced buildings.

PATH C:

Special consideration and flexibility due to unique circumstances.



Decarbonization Plan:

Must include energy/GHG emissions audit and cost analysis.

- Net-Zero by 2050
- Low-Emissions by 2050

Eligibility Criteria Include:

- Conflicts with historic status
- Sub-alt or seismic upgrade
- Infeasible structural/electric upgrades req. to meet net-zero
 - And more...

PATHS A & B Most Buildings Will Meet Standard GHGI Targets (GHGIT)

Building Activity Type	2031 - 2035	2036 - 2040 ¹	2041 - 2045 ^{1, 2}	2046 - 2050 ^{1, 3}
College/University	2.69	1.57	0	0
Entertainment/ Public Assembly	1.18	0.69	0	0
Fire/Police Station	2.23	1.30	0	0
Hospital	4.68	2.73	0	0
Hotel	2.06	1.20	0	0
K-12 School	0.95	0.56	0	0
Laboratory	6.30	3.68	0	0
Multifamily Housing	0.89	0.63	0.37	0
Non-Refrigerated Warehouse	0.77	0.45	0	0
Office	0.81	0.47	0	0

Building Activity Type	2031 - 2035	2036 - 2040 ¹	2041 - 2045 ^{1, 2}	2046 - 2050 ^{1, 3}
Other	2.48	1.45	0	0
Recreation	3.22	1.88	0	0
Refrigerated Warehouse	0.98	0.57	0	0
Residence Hall/ Dormitory	1.16	0.68	0	0
Restaurant	5.73	3.34	0	0
Retail Store	1.03	0.60	0	0
Self-Storage Facility	0.31	0.18	0	0
Senior Living Community	2.11	1.23	0	0
Services	1.36	0.79	0	0
Supermarket/ Grocery Store	3.42	2.00	0	0
Worship Facility	1.20	0.70	0	0

1 – Targets may be revised by future rule, per subsection 925.070.A.

2 – Net-zero emissions by 2041-2045 for nonresidential.

3 – Net-zero emissions by 2046-2050 for multifamily housing.

4 – Pursuant to Section 22.925.110, owners of low-income housing, human service use, and low-rent housing may receive an extension from meeting the GHGITs in 2031-2035 but still must meet benchmarking verification and all other reporting obligations for 2031-2035.

Building Activity Types Used for GHGIT

Building Activity Types	Portfolio Manager Building / Space Types Included
College/University	College/University
Entertainment/Public Assembly	Convention Center, Lifestyle Center, Movie Theater, Other - Entertainment/Public Assembly, Social/Meeting Hall, Performing Arts, Museum, Transportation Terminal/Station, Stadium (Open), and Pre-school/Daycare
Fire/Police Station	Fire Station, Police Station
Hospital	Hospital (General Medical & Surgical), Other/Specialty Hospital
Hotel	Hotel, Other-Lodging/Residential
K-12 School	K-12 School
Laboratory	Laboratory
Multifamily Housing	Multifamily Housing
Non-Refrigerated Warehouse	Non-Refrigerated Warehouse, Distribution Center
Office	Office, Medical Offices, and Other-Financial Offices
Other	Courthouse, Adult Education, Other – Education, Prison/Incarceration, Other, Other – Utility, and Energy/Power Station, Outpatient Rehabilitation/Physical Therapy, Urgent Care/Clinic/Other Outpatient.
Recreation	Fitness Center/Health Club/Gym and Other – Recreation
Refrigerated Warehouse	Refrigerated Warehouse
Residence Hall/Dormitory	Residence Hall/Dormitory
Restaurant	Restaurant, Food Service, Other - Restaurant/Bar
Retail Store	Retail Store, Automobile Dealership, Bank Branch, Enclosed Mall, Other – Mall, Strip Mall
Self-Storage Facility	Self-Storage Facility
Senior Living Community	Senior Living Community, Residential Care Facility
Services	Library, Repair Services (Vehicle, Shoe, Locksmith, etc), Other – Services, Other - Public Services, Mailing Center/Post Office, and Personal Services (Health/Beauty, Dry Cleaning, etc)
Supermarket/Grocery Store	Supermarket/Grocery Store
Worship Facility	Worship Facility

Path A flexibility

Details, timeline to apply (if needed), documentation required, etc. to come with Director's Rule.

- **Electric-only buildings** are exempt from GHGIT requirements and reporting for all intervals. But must still verify benchmarking.
- **2031-2035 greenhouse gas intensity targets (GHGIT) are required.**
 - **2036 and later targets are provisional** and may be adjusted by rule (in future years).
- **Emissions factors are provisional** and will be adjusted by rule as utility energy mixes change.
- **Portfolio, campus, connected buildings compliance allowed.** GHGIT would be an aggregate of all space types in all the buildings.
- **Alternate GHGIT** based on baseline of individual building(s)
 - campus, connected buildings, or public/nonprofit portfolio
 - Building without an activity type or > 50% as 'other'
 - Buildings with GHG intensity 3.5 times the standard GHGIT

Path B flexibility

Details, timeline to
apply (if needed),
documentation
required, etc. to come
with Director's Rule.

- **Alternative Compliance Payment** in 2031-2035
- **Extensions:**
 - new construction
 - financial distress
 - high vacancy (% TBD in rules)
- **Exemption:** demolition scheduled within 3 years of compliance deadline
- **End-use emissions deductions for all compliance intervals**
 - Emergency backup generators
 - Backup heating in hospitals and labs
 - Electric vehicle charging
 - Comms equip. unrelated to building purpose like cell towers and antenna
 - Fossil fuel equipment within individual residential condominium units
- **End-use emissions deductions for some compliance intervals**
 - Cooking in nonresidential and multifamily spaces (2031-2040)
 - High intensity process equipment in hospitals, labs (2031-2040)
 - High intensity laundry in hotels (2031-2040)
 - District energy contract in place (e.g., CenTrio Customer) (2031-2035)

Path B flexibility (cont.)

- **Multifamily**
 - Prescriptive Path: Convert hot water or HVAC equipment to heat pump or in-unit electric resistance (per code) (2031-2045)
 - Low-income / low-rent housing and human service uses eligible for GHGIT extension to 2036-2040.
 - Low-income housing eligible for GHGIT extension to 2041-2045 if not yet reached refinancing date.
- **Residential Condominiums**
 - Deduction: Emissions from fossil fuel equipment located within individual residential condominium units (e.g., gas stove) (all compliance intervals)
 - Considered "all-electric" when all space and water heating systems, and other equipment and appliances, under common ownership use only electric energy



Path C flexibility

Custom Decarbonization Compliance Plan:

- *Net-Zero by 2050*
- *Low-Emissions by 2050*

Apply to use based on
eligibility. Details to
come with Director's
Rule.

- **District campus** (served by common energy system)
- Conflict with **landmark or historic district designation**
- Concurrent **substantial alteration** and/or **seismic** upgrade
- Equipment not yet at **life expectancy (% TBD in Rules)**
- Disruption to a non-interruptible **research function**
- Actions to meet targets conflict with an **existing lease**
- **Structural and electric upgrades** required to meet net-zero emissions are infeasible
- The incremental cost of meeting net-zero emissions would create **financial distress**
- Infeasibility in a **low-income housing** building
- **No practicable** low or zero-emissions **alternative**

Compliance flexibility

- **Alternative Compliance Payment** option 2031-2035.
- **360-day grace period** after compliance deadline before any fines are issued.
- **May reduce penalty** if no more than 20% above target.
- Director has authority to **mitigate fines** and to **establish grace periods** for penalties.

OSE Best Practices for All Owners

- Coaching & Technical Assistance Support Program
- Education, Outreach and Training
- Helpdesk
- Incentives
- History with benchmarking and tune-ups of >95% compliance, primarily due to extensive outreach and compliance support

Penalties, a last resort

For each five-year compliance interval:

a. Failure to report:

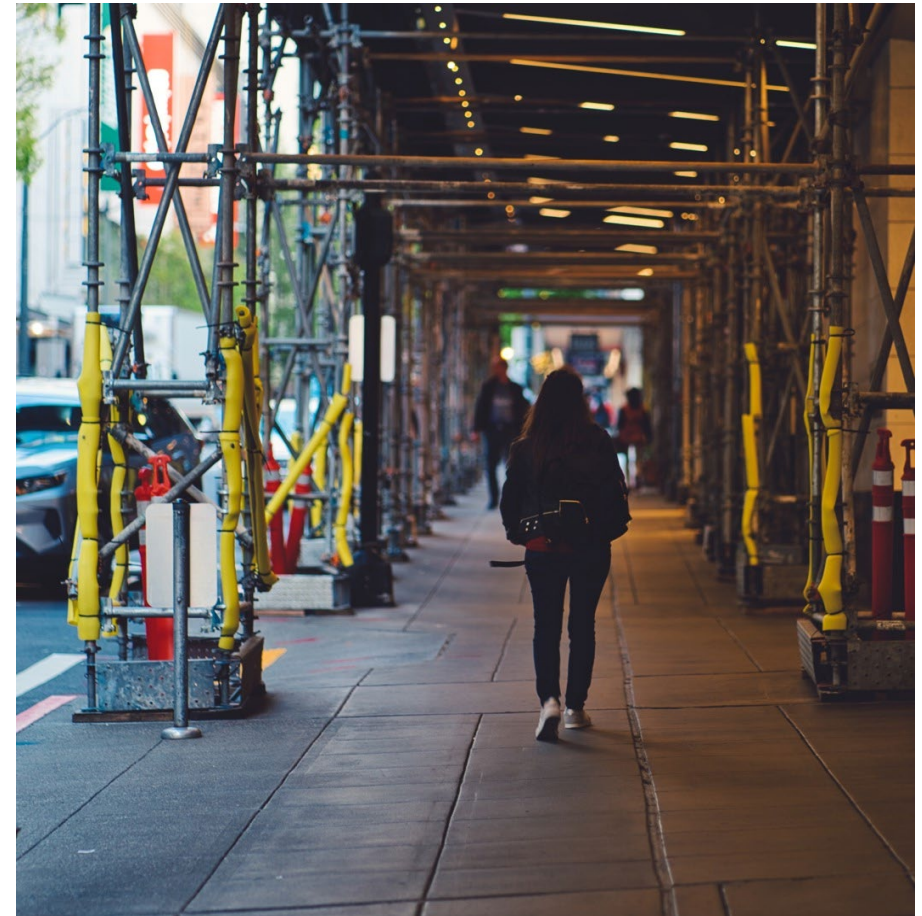
- \$15,000 for buildings over 50,000 square feet
- \$7,500 for buildings over 20,000 square feet up to 50,000 square feet

b. Inaccurate reporting:

- \$15,000 for buildings over 50,000 square feet
- \$7,500 for buildings over 20,000 square feet up to 50,000 square feet

c. Not achieving greenhouse gas intensity target:

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



Support: OSE launching programs, growing them, and securing more funding

BEPS Support (in planning):

- Helpdesk
- Education and training (owners and service providers)
- Technical support
- Case studies & fact sheets

Seattle Clean Buildings Accelerator (launched!)

Coaching, education & resources and financial support for building owners and managers, with most funding **prioritized toward non-profits and those serving frontline communities** to:

- Meet WA State Clean Buildings energy mandate
- Plan for emissions reductions under BEPS
- Identify utility and other incentives
- \$4.5M beginning 2024 for financial support

Engineering & Capital Investments

- ✓ **Approx. \$600K 2024 for engineering analysis and design** (City and DOE EECGB)
- ✓ **Awarded \$2.3M** in Dept. of Energy funding for decarbonizing low-income housing
- ✓ **Green New Deal 2022 Opportunity Fund: \$2M** to decarbonize low-income housing
- ✓ Pursuing federal infrastructure funds, inflation reduction act funds, State and other funding opportunities

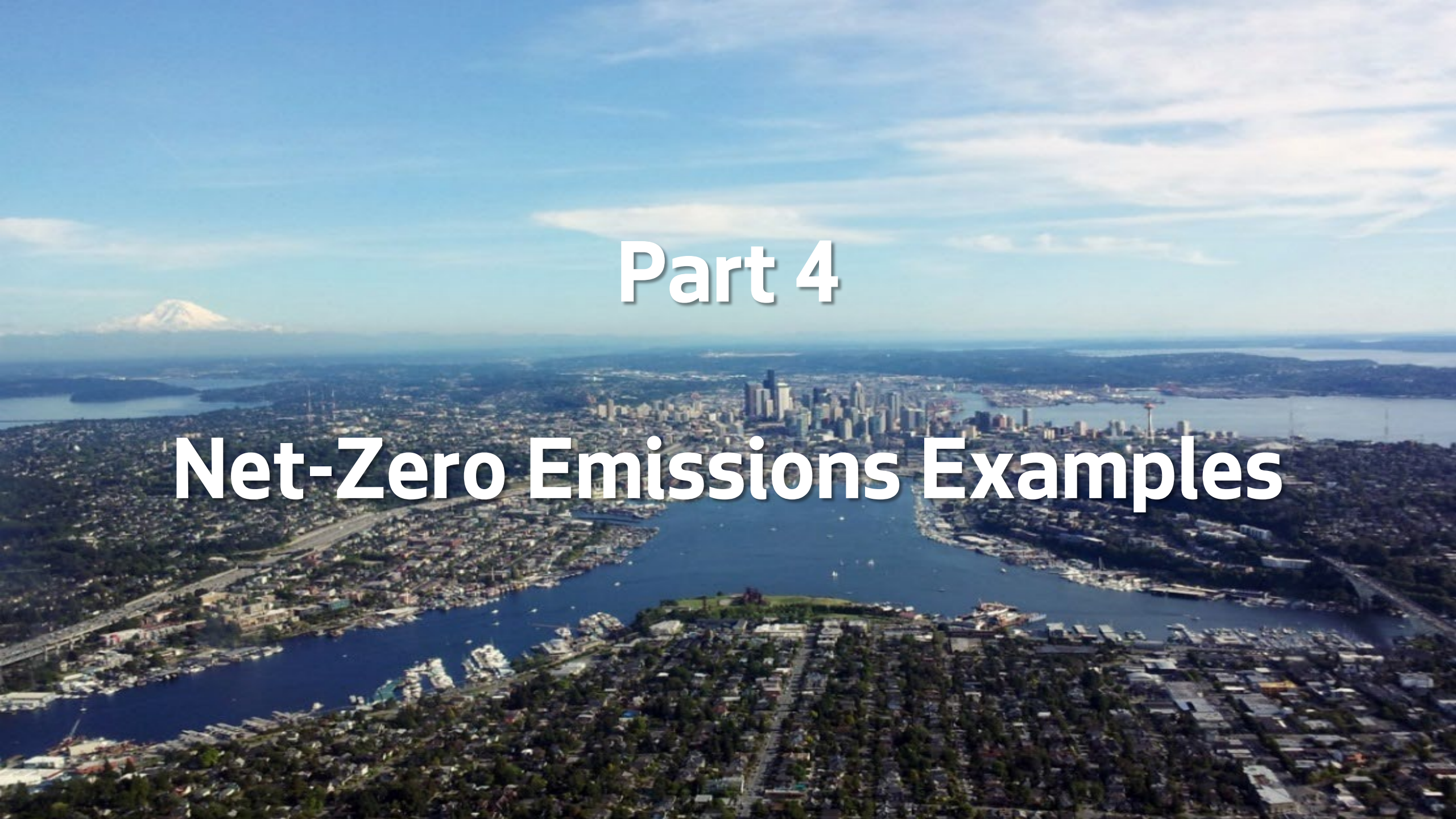
Next coaching session starts Feb. 27th
Email cleanbuildings@seattle.gov to learn more.

Q & A Break:
What clarifying questions
do you have?

(10 min.)

Part 4

Net-Zero Emissions Examples



Stewart Manor Affordable Housing

An energy efficiency and electrification path to carbon neutral

Stewart Manor Case Study

Owner: Seattle Housing Authority

Consultants: UW Integrated Design Lab,
Solarc, Seattle Office of Housing



Credit: UW Integrated Design Lab

**CONCEPT PLAN - Energy efficiency,
health, and decarbonization strategies**

Heat Pump Water Heating

Energy Recovery Corridor Ventilation

Heat Pump Cooling in Community Room

Roof Insulation

Total Estimated Decarbonization Cost (2021): \$205,500

Total Estimated Overall Cost (2021): \$403,500

Energy reduction: 35%
Fossil fuel reduction: 100%

Washington State Department of Services for the Blind

An energy efficiency and electrification path to carbon neutral



Credit: Seattle OSE

	Like for Like Replacement	Renewal & Decarbonization
Scope of Work (beginning 2018)	Gas Boiler & Chiller	**
Project Cost	\$990,000	\$2,723,000
City Light Incentives		\$23,200
Total Cost of Ownership (30 years)	\$5,034,754	\$3,929,970

Services for the Blind Case Study
Owner: WA Dept. of Enterprise Services
Consultants: UMC

****COMPLETE - Energy efficiency, health, and decarbonization strategies**

New Windows

Lighting Upgrade

Mechanical Controls & Distribution

Dedicated Outdoor Air Ventilation

Heat Pump Hot Water

Heat Pump Heating & Cooling

Energy reduction: 70%

Fossil fuel reduction: 100%



Part 5

Estimate a Building's

GHGI and GHGIT

What is being measured or tracked?



Gas



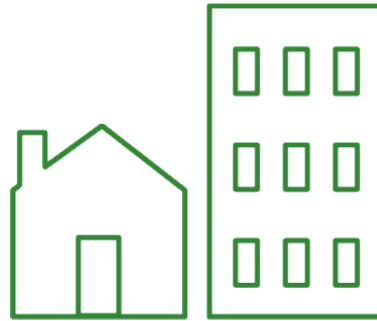
Electric



Steam



District



**GreenHouse
Gas Intensity
(GHGI)**
(kgCO₂e/ft²/year)

Total annual weather normalized fuel
use for each energy source (kBtu/year)

X

Emissions Factor of each energy source
(kgCO₂e/kBtu)

= total kgCO₂e/year

Building's total square feet (ft²)
(excluding parking)

CO₂e is carbon dioxide emissions
equivalent

Emissions Factor is the CO₂e
associated with a unit of energy

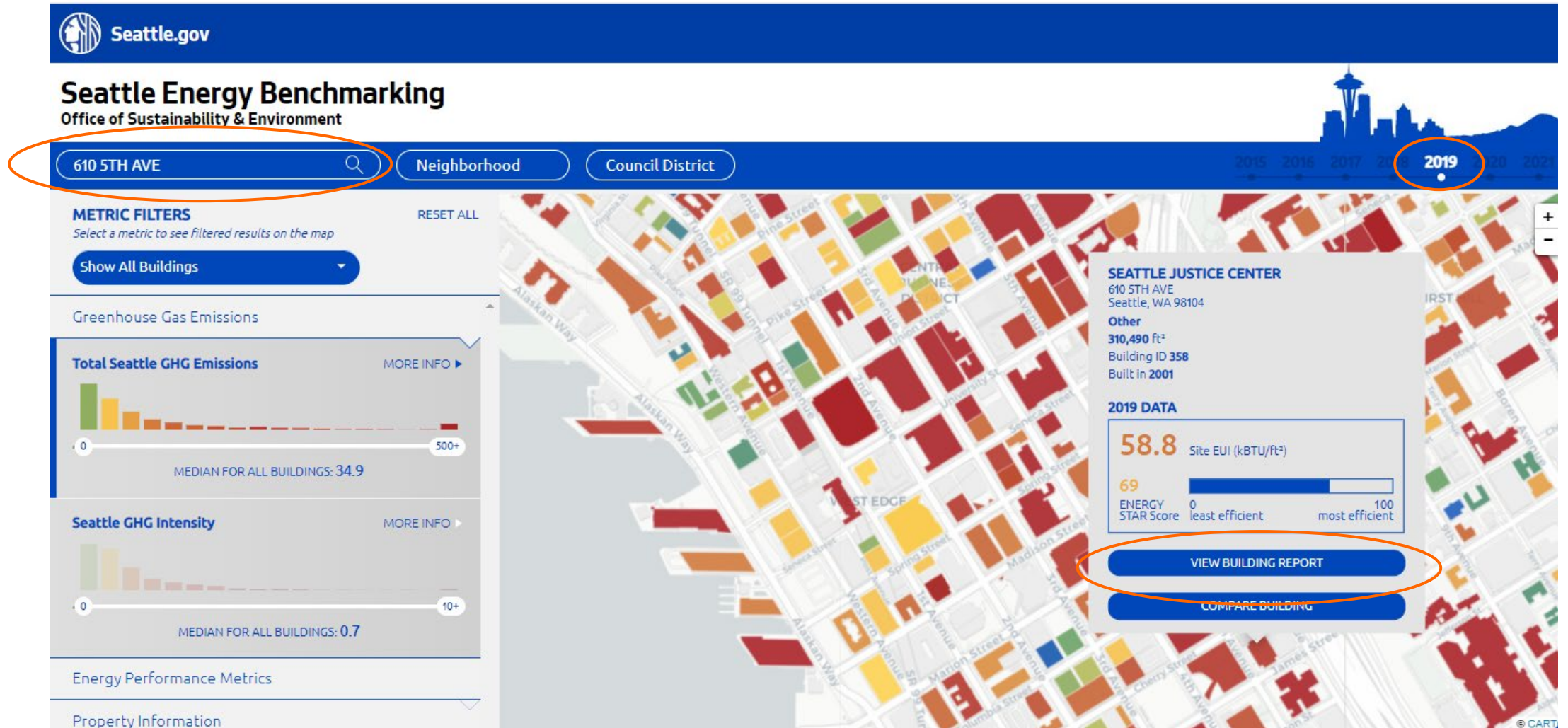
Emissions Factors for Seattle BEPS

Energy source	Emissions factors (kgCO ₂ e/kBtu)	
	For baseline GHGI (2019-2028)	For compliance GHGI (2031 – 2035) (Provisional)
Seattle City Light electricity	.0058	.0029
Puget Sound Energy natural gas	.053	.053
CenTrio district thermal energy	.081	.081

**DO NOT USE ENERGY STAR PORTFOLIO MANAGER
EMISSIONS FACTORS OR GHG/GHGI METRICS!**

Seattle Energy Benchmarking Map

www.seattle.gov/energybenchmarkingmap



Seattle Energy Benchmarking Map

www.seattle.gov/energybenchmarkingmap

2019 Energy Use and Emissions Report



Seattle
Office of Sustainability
& Environment

SEATTLE JUSTICE CENTER

610 5TH AVE
SEATTLE WA 98104

Sq Footage	310,490
Type	Other
OSE Building ID	358
Year Built	2001

58.8 KBTU/FT²
energy use per square foot*

↓ 38% lower than
similar buildings.



*All EUIs are adjusted for weather

1 KG CO₂e/FT²
emissions per square foot

↓ 59% lower than
similar buildings.



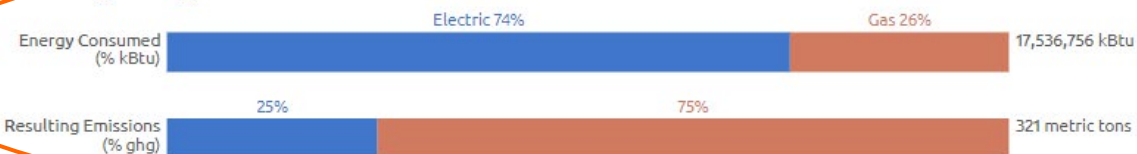
i New state requirement! Action is required.

This building likely must comply with Washington state's Clean Building Performance Standard. [Learn more below.](#)

CLIMATE POLLUTION IMPACT OF ENERGY USE

Over 90% of Seattle's building emissions come from burning fossil fuels like fracked gas and oil for furnaces, water heaters, and appliances - including gas used to generate steam. In Seattle, all-electric buildings have the lowest emissions.

This building's energy and emissions:



321 MT CO₂e is the equivalent of **68.4 passenger vehicles driven** for one year.

Example "Office" Building

Example 75,000 SF "Office" Building

- 65,000 SF Office space
- 10,000 SF Retail space
- 5,000 SF Gym space



Example “Office” Building: 3 Steps

1. Determine the building’s GHGI
2. Estimate it’s GHGIT
3. Determine if it meets or exceeds the target.

1. Building’s 2019 greenhouse gas intensity (GHGI) (kg CO ₂ e/sf/yr)	?
2. Building’s estimated target (GHGIT) (kg CO ₂ e/sf/yr)	?
3. Does GHGI exceed or meet GHGIT? (kg CO ₂ e/sf/yr)	?



Example Building's 2019 Greenhouse Gas Intensity (GHGI)

Fuel Source	2019 Annual WN Energy Use (kBtu/yr)	Fuel Emissions Factors (2019-2025) (kg CO2e/kBtu)	Annual GHG Emissions (kg CO2e/yr)
Electric	2,350,000	0.0058	13,630.00
Gas	2,200,000 X	0.053 =	116,600.00
Steam	0	0.081	0.00
Sub-Total	4,550,000		130,230.00
Eligible Deductions (TBD)	0		0
Totals	4,550,000		130,230.00
Total Gross Floor Area (SF) – Excluding Parking			75,000
			÷
			1.74
			GHGI (kg CO2e/sf/yr)

Rulemaking Guidance to Come

- Cooking emissions
- High intensity process equip. (hospitals & labs)
- High intensity laundry equip. (hotels & healthcare)
- Emergency power back-up
- Back-up emergency heat (hospitals & labs)
- EV charging

Building Activity Types Used for GHGIT

Building Activity Types	Portfolio Manager Building / Space Types Included
College/University	College/University
Entertainment/Public Assembly	Convention Center, Lifestyle Center, Movie Theater, Other - Entertainment/Public Assembly, Social/Meeting Hall, Performing Arts, Museum, Transportation Terminal/Station, Stadium (Open), and Pre-school/Daycare
Fire/Police Station	Fire Station, Police Station
Hospital	Hospital (General Medical & Surgical), Other/Specialty Hospital
Hotel	Hotel, Other-Lodging/Residential
K-12 School	K-12 School
Laboratory	Laboratory
Multifamily Housing	Multifamily Housing
Non-Refrigerated Warehouse	Non-Refrigerated Warehouse, Distribution Center
Office	Office, Medical Offices, and Other-Financial Offices
Other	Courthouse, Adult Education, Other – Education, Prison/Incarceration, Other, Other – Utility, and Energy/Power Station, Outpatient Rehabilitation/Physical Therapy, Urgent Care/Clinic/Other Outpatient.
Recreation	Fitness Center/Health Club/Gym and Other – Recreation
Refrigerated Warehouse	Refrigerated Warehouse
Residence Hall/Dormitory	Residence Hall/Dormitory
Restaurant	Restaurant, Food Service, Other - Restaurant/Bar
Retail Store	Retail Store, Automobile Dealership, Bank Branch, Enclosed Mall, Other – Mall, Strip Mall
Self-Storage Facility	Self-Storage Facility
Senior Living Community	Senior Living Community, Residential Care Facility
Services	Library, Repair Services (Vehicle, Shoe, Locksmith, etc), Other – Services, Other - Public Services, Mailing Center/Post Office, and Personal Services (Health/Beauty, Dry Cleaning, etc)
Supermarket/Grocery Store	Supermarket/Grocery Store
Worship Facility	Worship Facility

PATHS A & B Most Buildings Will Meet Standard GHGI Targets (GHGIT)

Building Activity Type	2031 - 2035	2036 - 2040 ¹	2041 - 2045 ^{1, 2}	2046 - 2050 ^{1, 3}
College/University	2.69	1.57	0	0
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Retail Store	1.03	0.60	0	0
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Worship Facility	1.20	0.70	0	0

1 – Targets may be revised by future rule, per subsection 925.070.A.

2 – Net-zero emissions by 2041-2045 for nonresidential.

3 – Net-zero emissions by 2046-2050 for multifamily housing.

4 – Pursuant to Section 22.925.110, owners of low-income housing, human service use, and low-rent housing may receive an extension from meeting the GHGITs in 2031-2035 but still must meet benchmarking verification and all other reporting obligations for 2031-2035.

Estimate a Building's Greenhouse Gas Intensity Target (GHGIT) (2031-2035 targets)

Pro-rate GHGIT by Building Activity Types (like WA CBPS EUI target)

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

Guidance in Rulemaking

- Normalization for operating hours (credit for more weekly hours, like WA CBPS)
- Normalization for occupancy density in multifamily (credit for smaller units/more tenants)
- Space use rules

Example “Office” Building

Does it meet or exceed the target?

➤ It exceeds the target, so this building would need to reduce emissions to comply.

1. Building’s 2019 greenhouse gas intensity (GHGI) (kg CO ₂ e/sf/yr)	1.74
2. Building’s estimated target (GHGIT) (kg CO ₂ e/sf/yr)	1.00
3. Does GHGI exceed or meet GHGIT? (kg CO ₂ e/sf/yr)	.74



Q and A

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