

100% Clean Buildings

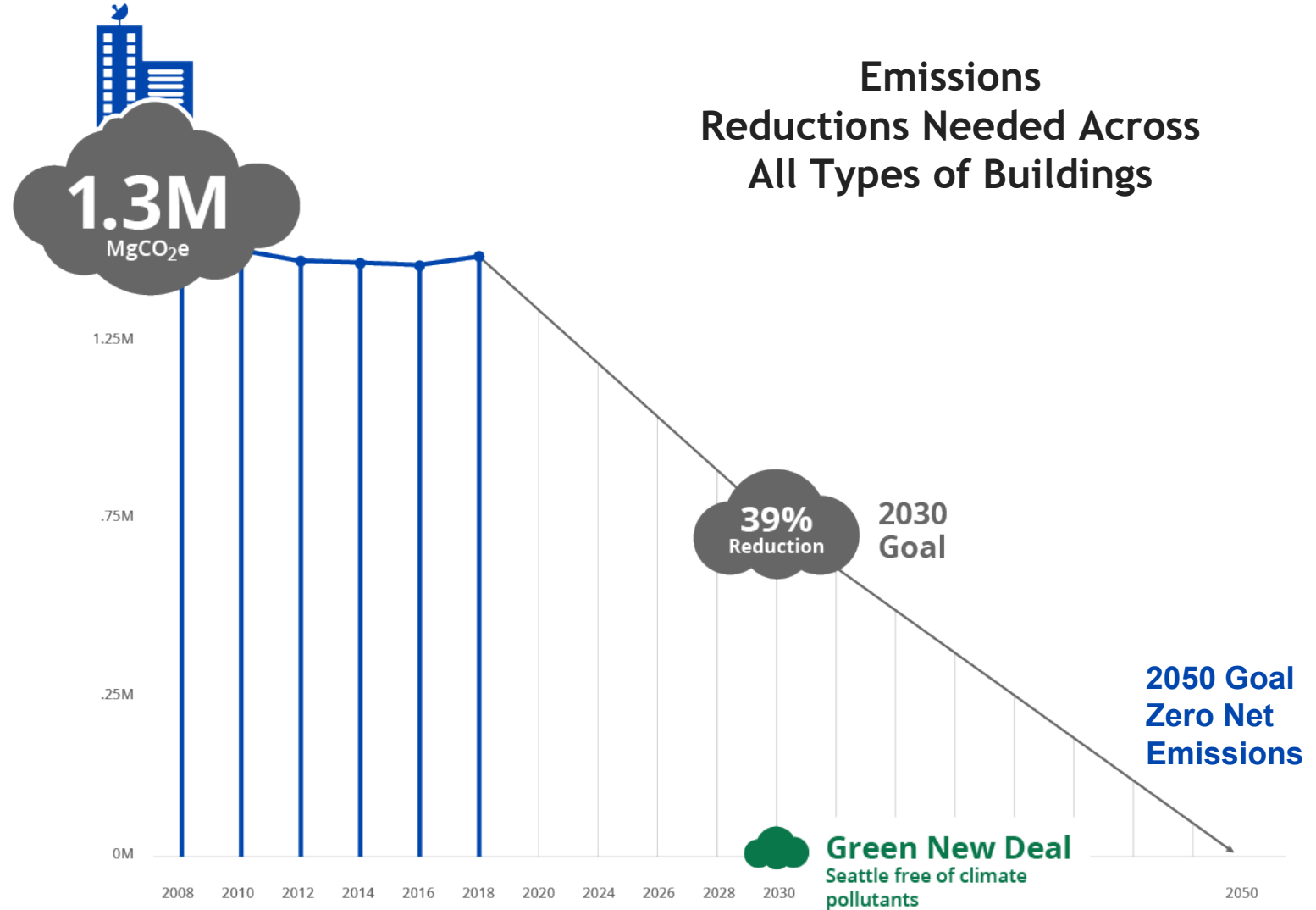
Performance Standards for Existing Large Nonresidential and Multifamily Buildings

Draft Policy Overview | October 13, 2022
Seattle Hotel Association Fall Member Meeting



Seattle
Office of Sustainability
& Environment

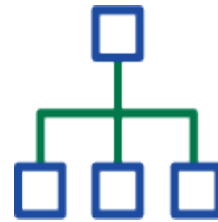
Bold action is needed to significantly reduce climate emissions from all types of buildings in Seattle.



The most effective near-term action is building emissions performance standards for larger buildings.



Sets carbon-emissions-reduction targets that buildings must meet over time.



Provides a framework for owners to improve energy efficiency and transition to cleaner energy sources.

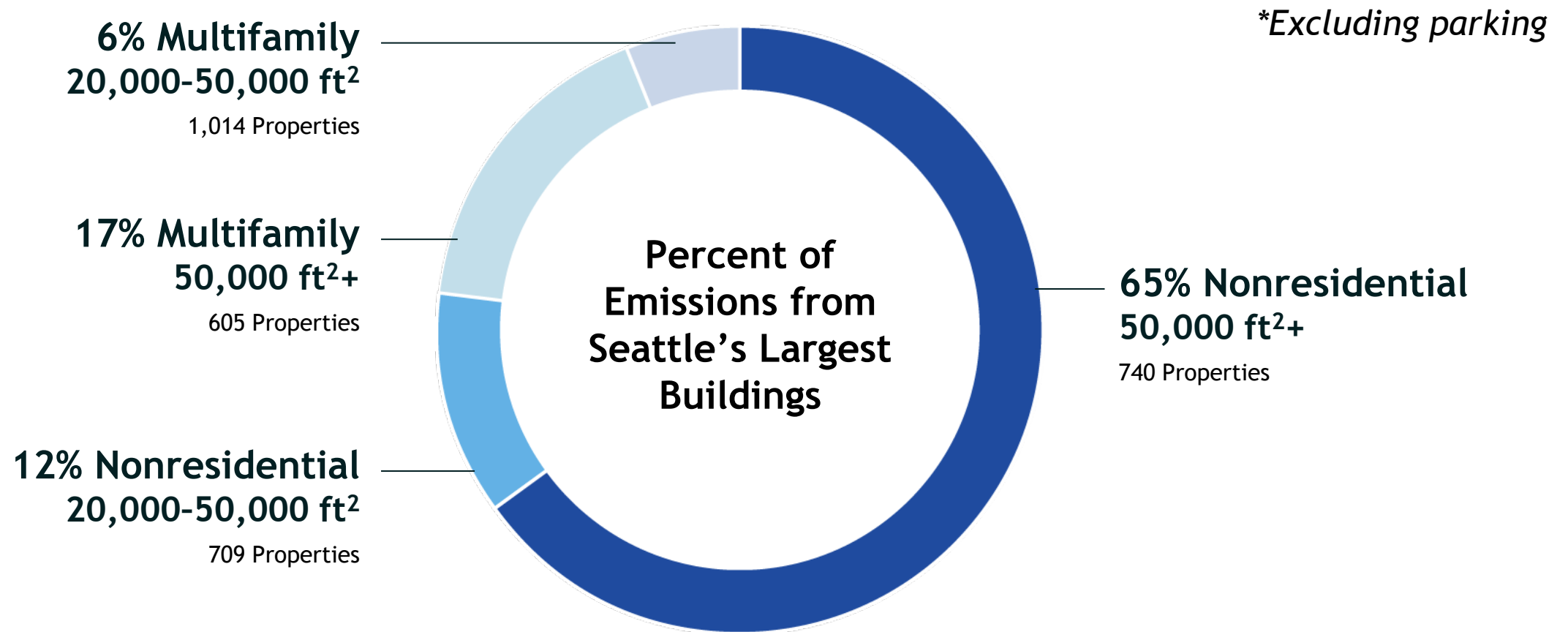


Offers flexibility to choose the technologies and operational strategies that work best for owners.

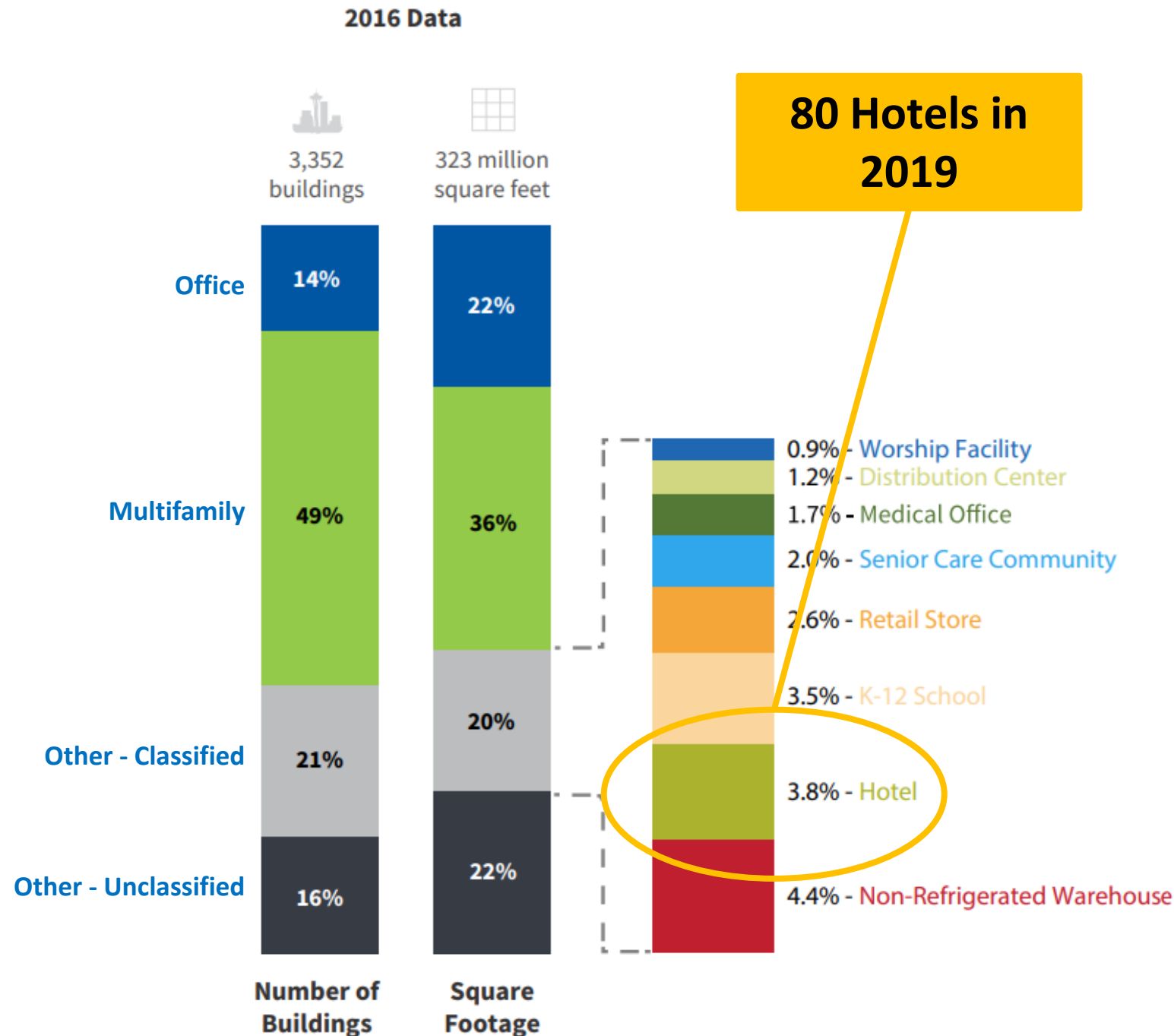


Identifies long-term expectations so owners can plan for upgrades.

Applicability: Nonresidential and multifamily buildings >20,000 SF*

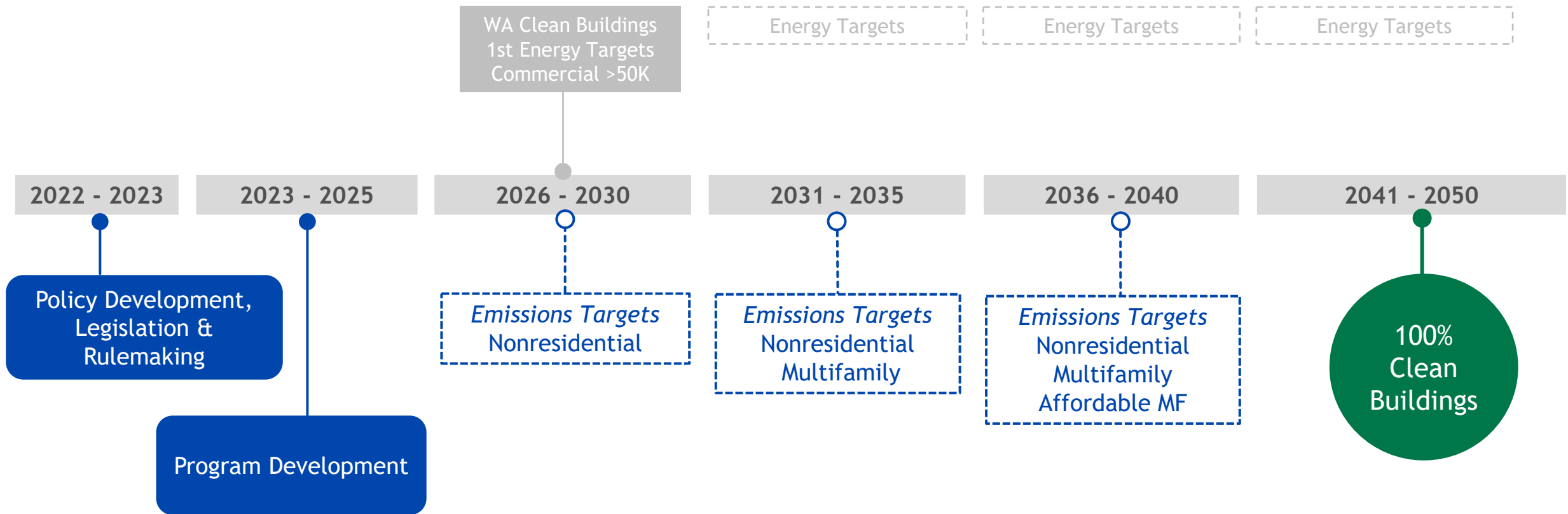


Applicability: Seattle Building Types >20,000 SF



A Long Runway

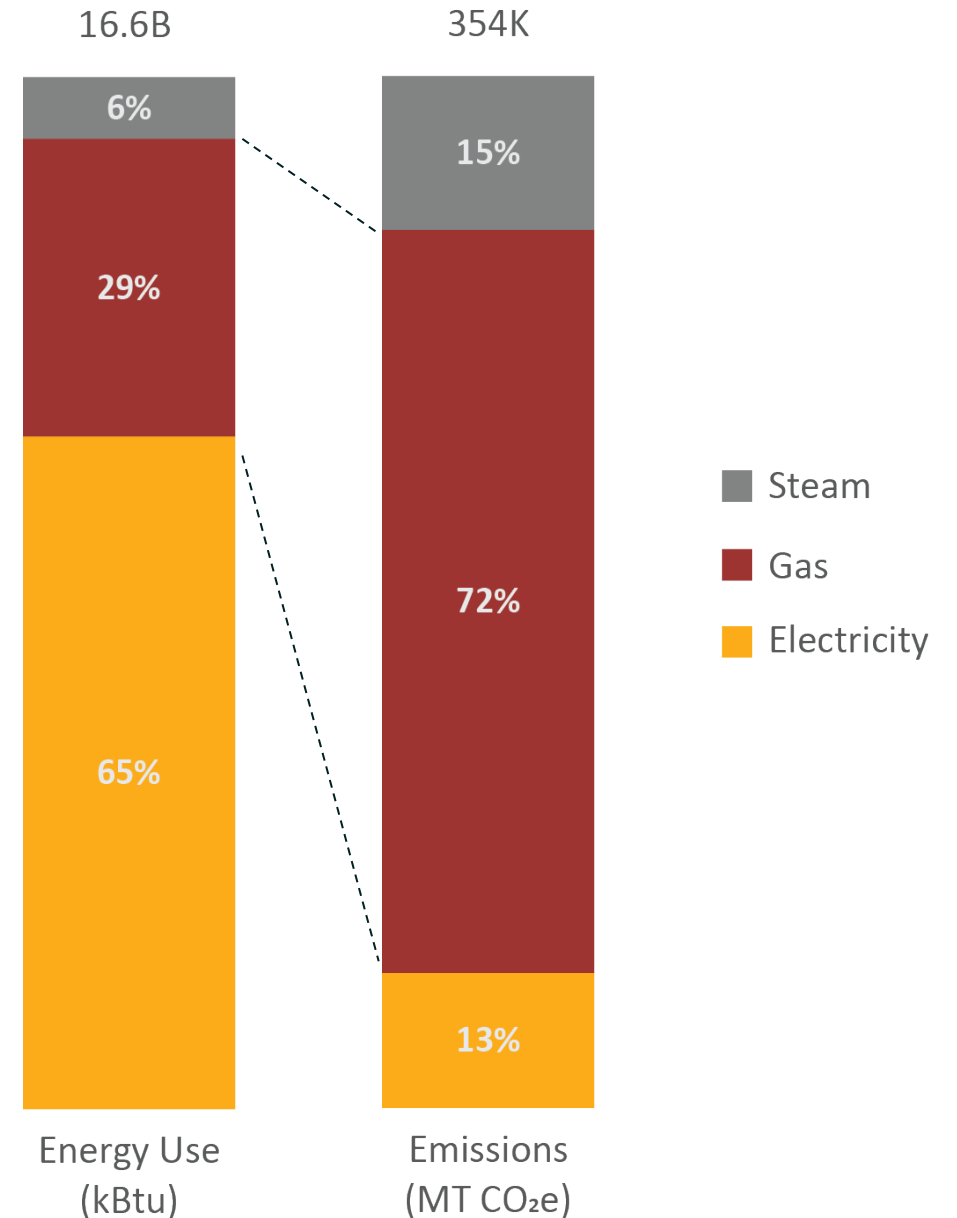
Seattle Building Emissions Performance Legislation
signals the market and allows for a gradual transition to truly 100% clean buildings



Seattle emissions-based performance standards would address buildings' largest emissions contributors — gas and district steam.

Source: 2019 weather-normalized energy and emissions for Seattle commercial and multifamily buildings 20,000 SF and greater

Energy Use and Emissions (2019)



Greenhouse Gas Intensity (GHGI) Metric



Gas



Electric

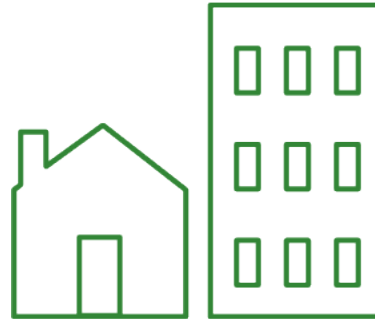


Steam



District

Total annual emissions
(emissions factors by fuel type)



Total square feet
(ft²)



Greenhouse Gas Intensity
(GHGI)
(kgCO₂e/ft²/yr)

Seattle Building Emissions Performance Standards

Requirements

- ✓= **Verify Benchmarking:** by someone who meets qualifications (like Building Tune-Ups Specialist approach)
- 📋 **Plan & Identify:** Document current performance & equipment, actions to achieve targets
- ☁️ **Meet GHGI Emissions Targets (or Alternative Compliance):** Phased in by building size and type (2026-2049)
- ✓ **Achieve:** Get to net-zero emissions (2041-2050)

Building Tune-Ups requirement proposed to sunset after completion of the 2023-2026 compliance cycle.

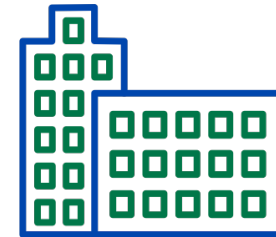


Five-year cycles
aligned with State of
Washington
requirements for
energy efficiency.

Washington Clean Buildings Energy Standards



Tier 1: Large Nonresidential
buildings > 50K ft²
(beginning 2026)















Tier 2: Adds Nonresidential
buildings 20-50K & Multifamily
>50K ft² (energy targets after
2030)



Focuses on O + M and energy
performance targets, rather
than emissions targets

Proposed Compliance Timeline

Nonresidential Buildings				
	1st Cycle	2nd Cycle	3rd Cycle	4th Cycle
Requirements	  	  	  	  
>220,000	2026 (2027)	2031	2036	2041
>90,000 - 220,000	2027	2032	2037	2042
>50,000 - 90,000	2028	2033	2038	2043
>30,000 - 50,000	2029	2034	2039	2044
>20,000 - 30,000	2030	2035	2040	2045
Portfolios / Campuses	2028	2033	2038	2043

	Verify benchmarking report
	Plan & identify actions for meeting next cycle targets
	Meet GHGI Targets 2026-2040 (or alternative compliance)
	Achieve Net-Zero 2041-2045

**Portfolio option for nonprofit and public owners only (e.g., school system).*

Proposed Alternative Compliance (Details TBD in Rulemaking)

Nonresidential: 2026 (2027) - 2030



Buildings above Greenhouse Gas
Intensity target can reduce
emissions by 10%



Proposed Alternative Compliance (Details TBD in Rulemaking)

Alternative Compliance Payment: 2026 - 2035

- Payment based on an annual per MTCO₂e basis, for emissions beyond compliance target.
- The cost of each MTCO₂e/year to be based on the Social Cost of Greenhouse Gas Emissions.

Funds to be used for technical and financial assistance, prioritized towards under-resourced buildings.



Proposed Alternative Compliance (Details TBD in Rulemaking)

All-Electric Buildings

Buildings where the only source of energy being used is electricity are granted an exemption from meeting the Greenhouse Gas Intensity target compliance obligations.

<https://tophotel.news/first-net-zero-hotel-in-the-u-s-to-open-this-spring/>



PROJECTS ▾

PIPELINE

CHAINS

PEOPLE ▾

First net-zero hotel in the U.S. to open this spring

by Lauren Jade Hill | 08 May 2022 | Hotel Projects, Projects



Imagery © 2022 Hilton

What's anticipated to become the first net-zero and passive house-certified hotel in the U.S. is set to make its debut in May.

Extensions, Exemptions & Accommodations (Details TBD in Rulemaking)

For certain buildings such as:

- scheduled to be demolished
- financial distress
- significant barriers, such as
 - historic properties
 - buildings with unreinforced masonry (URM) that is a seismic risk



1999 Nisqually earthquake damage. USGS photo.

Extensions, Exemptions & Accommodations (Details TBD in Rulemaking)

For certain uses or equipment such as:

- commercial cooking equipment (2026-2035)
- laundry in hotels and healthcare (2026-2035)
- emergency power back-up generation
- high-intensity process equipment used in healthcare and laboratories (2026-2035)

Professional chefs tout the culinary — and environmental — advantages of induction stoves



(Craig Chivers/CBC)

<https://www.cbc.ca/news/science/what-on-earth-induction-stoves-1.6411937>

We need to support owners as they decarbonize and improve their facilities.

Seattle Clean Buildings Accelerator

OSE has launched an equity-centered support program that prioritizes technical support services for owners and managers of buildings serving/supporting frontline communities. Coaching program for prioritized owners to help them build internal capacity, and self-led learning available for all.

Program will help participants with:

- Meeting WA State energy targets
 - Emissions reduction planning
 - Identifying incentives and financing
- Preparing to pursue federal infrastructure funds, inflation reduction act funds, and other opportunities



Draft Timeline

- April & June: open houses & stakeholder engagement
- July - October: stakeholder input on preliminary draft legislation
- October 25: Draft Targets Webinar
- October 2022- January 2023: final legislation drafted & Mayor review
- February - March 2023: legislation considered at City Council
- April - December 2023: rulemaking

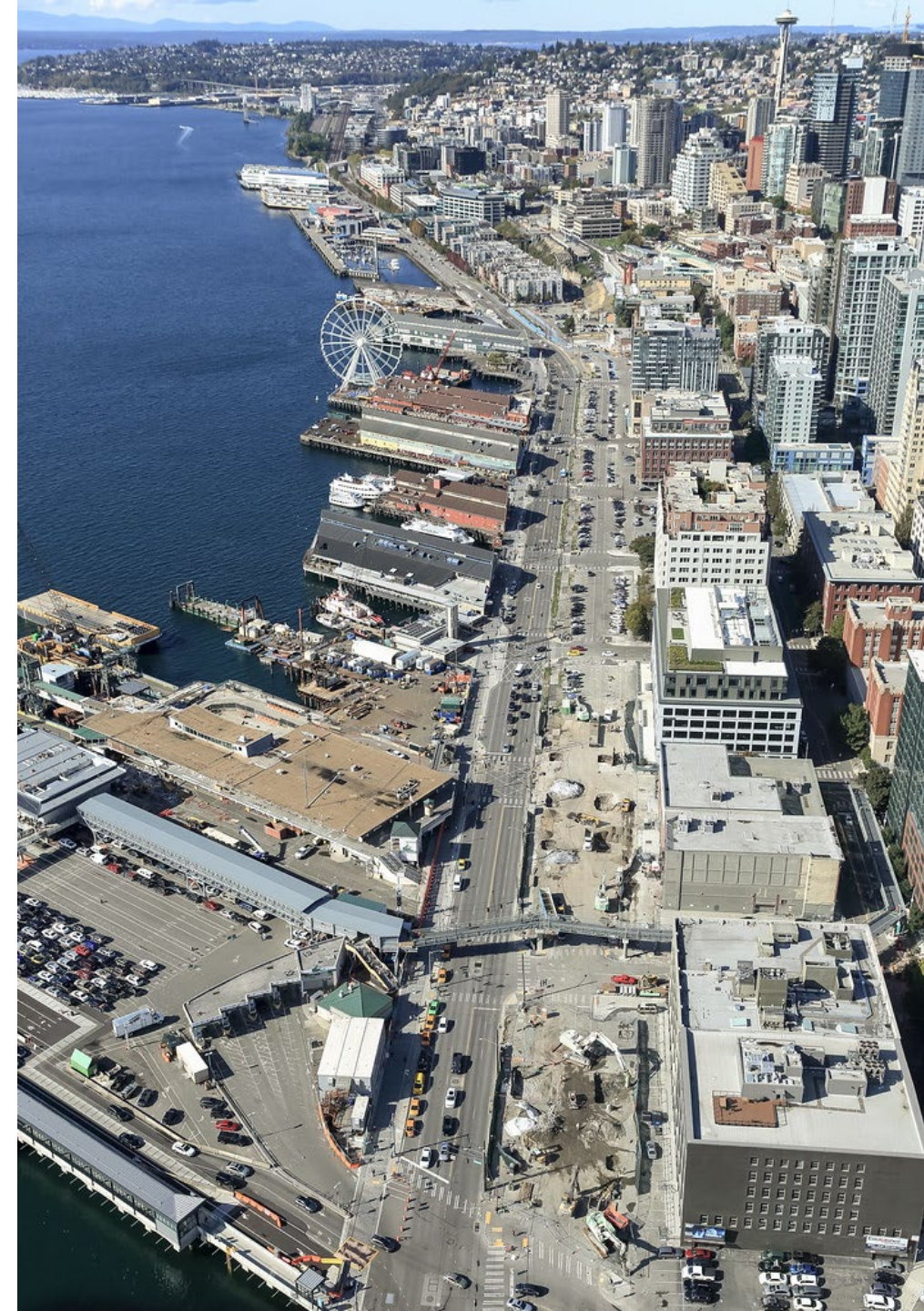


Technical Webinar: Draft Emissions Targets for Seattle Building Performance Standards

OSE and SBW Consulting will share the draft greenhouse gas intensity targets under consideration and the analysis conducted to inform the targets. Presentations will be followed by the opportunity for comments and questions. OSE will also provide a brief overview of the proposed policy and the updated timeline. This webinar is a follow-up to open houses in April and June that provided detailed background and the draft policy framework. Recordings and slides from those events are available at www.seattle.gov/building-performance-standards.

- **Date:** October 25, 2022 from 12:00pm to 1:00pm
- **Location:** Online via Zoom
- **Pre-register here:**
https://us06web.zoom.us/webinar/register/WN_3nqYS-oWSo-v6_dCnCagNg

This webinar will be recorded and posted on the OSE website afterwards.



Stay Engaged

City of Seattle Office of Sustainability & Environment

seattle.gov/building-performance-standards

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Seattle
Office of Sustainability
& Environment