Discussion of Ordinance No. 948 to Reduce Carbon Emissions from New Commercial Construction

November 15, 2021

Ray Allshouse, Building Official



Guiding Policies

Washington State Targets

- 70% less building energy use by 2030
- Statewide GHG emission reduction goals:
 - o 45% by 2030, 95% by 2050

2013 Shoreline Climate Action Plan, GHG emission reduction goals:

• 25% by 2020, 50% by 2030, 80% by 2050

K4C Policy Commitments

- Adopt codes that lead the way to "net-zero carbon" buildings
- Develop energy codes that support the transition to highly efficient/low carbon non-residential and multifamily buildings through reduced fossil fuels, renewable natural gas, and electrification

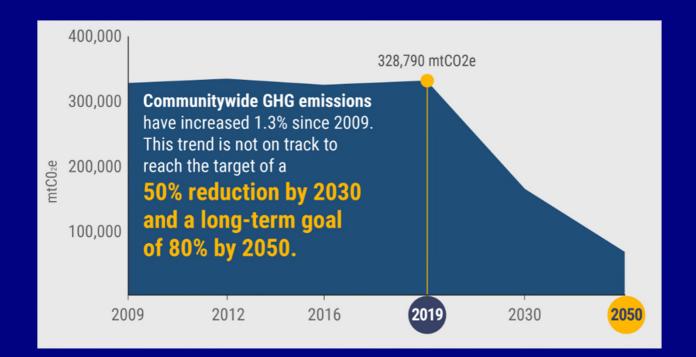






2019 GHG Emissions

1.3% increase since 2009 for Shoreline



Seattle's Approach

Seattle established guiding principles

- Build great envelope
- Eliminate combustion
- Use electricity wisely
- Generate power locally

Conducted an extremely comprehensive stakeholder process

- Staff technical expertise
- Public presentations and feedback sessions
- High industry participation & co-development



Context for Tonight

- 2018 WA State Energy Code was effective February 2021
- 2018 Seattle Energy Code Adoption: March 2021
- Bellingham Ordinance to Council: November 2021
- King County Ordinance to Council: First Quarter 2022
- SBCC in Rulemaking for 2021 WA State Energy Code
- These proposed amendments only apply to multifamily residential and commercial buildings



RCC Recommended Energy Code Amendments

King County and
Bellingham are currently
proposing to adopt most
of Seattle's
amendments

Local amendments only apply to multifamily & nonresidential buildings



Amendment Highlights include:

- Heat Pump Space Heating
- Hot Water Heat Pumps
- Identified C406 Credits
- Electrical Outlets at Gas Appliances
- Multi Family Solar Readiness
- Renewable Energy Requirement
- Reduce allowable fenestration U-values
- Total System Performance Ratio (TSPR)
- Lighting Power Allowance
- Heat Recovery
- Demand Control Ventilation
- Cooling System Alterations
- Sub-Standard Envelopes
- Total Building Performance (BPF)
- Thermal Bridging
- Efficiency Package Credits
- Envelope Exemption for Kitchens
- Metering for Existing Buildings
- Service Hot Water
- DOAS

These focus on decarbonization

These are current
WSEC requirements
where only values
have been modified

Amendment Highlights Focusing Specifically on Decarbonization

WA State's Clean Energy Transformation Act (CETA)

- By 2045, utilities must supply electricity that is 100% renewable or non-emitting Fossil Fuel-fired Ban based proposed provisions
- Sections C403.1.4 & C406.2, comfort heating
- Section C406.2, water heating service



Next Step: Potential Action on Ordinance No. 948 Currently Scheduled for December 6th



Questions and Discussion

