

Jeffery C. Allen
Chair
Idaho

Ed Schriever
Idaho

Doug Grob
Montana

Mike Milburn
Montana



Northwest **Power** and **Conservation** Council

KC Golden
Vice Chair
Washington

Thomas L (Les) Purce
Washington

Ginny Burdick
Oregon

Louie Pitt, Jr.
Oregon

May 9, 2023

MEMORANDUM

TO: Council Members

FROM: Elizabeth Osborne

SUBJECT: Policy Changes in the Buildings Sector in Washington

BACKGROUND:

Presenter: Liz Reichart, Washington Department of Commerce

Summary: Washington is committed to reducing greenhouse gas emissions across the economy. The buildings sector is responsible for a large part of the emissions from energy end uses. The state has adopted many different kinds of policies to reduce emissions from this sector that Ms. Reichart will discuss, including a clean buildings standard, residential and commercial building codes, requirements for electrification, and incentives and other programs to help customers invest in efficiency and clean energy resources. Some of the policies designed to support decarbonization in the buildings sector in Washington create opportunities for new energy efficiency, but some also increase the demand for electricity in the region.

Background: Liz Reichart is a Senior Energy Policy Specialist in the state energy policy office within the Washington Department of Commerce, specializing in energy efficiency in the built environment.

Washington Building Sector Decarbonization

LIZ REICHART, SENIOR ENERGY POLICY SPECIALIST



Washington State
Department of
Commerce

We strengthen communities



HOUSING AND HOMELESSNESS



INFRASTRUCTURE AND BROADBAND



SMALL BUSINESS ASSISTANCE



ENERGY



PLANNING AND TECH ASSISTANCE



COMMUNITY SERVICES AND FACILITIES



CRIME VICTIMS AND PUBLIC SAFETY



ECONOMIC DEVELOPMENT

2021 WA State Energy Strategy

- Align strategy with clean electricity laws
 - Energy Independence Act (I-937, 2006)
 - Clean Energy Transformation Act (SB 5611, 2019)
 - After 2025, no coal in resource mix
 - By 2030, greenhouse neutral electricity supply
 - By 2045, 100% renewable or non-emitting sources
- Align strategy with greenhouse gas emissions limits (HB 2311, 2020)
 - By 2030, 45% below 1990 levels
 - By 2040, 75% below 1990 levels
 - By 2050, 95% below 1990 levels and achieve net-zero emissions.

[2021 State Energy Strategy - Washington State Department of Commerce](#)

Decarbonizing the building sector



Percentage commercial and residential buildings powered by electricity

 **Electric space heating**

64%
electric in 2030

82%
electric in 2050

 **Water heating**

64%
in 2030

100%
in 2050

GHG EMISSION REDUCTIONS



14.8
MMT

2020

9.1
MMT

2030

0
MMT

2050

- Greater efficiency & electrification in buildings in 2020s short- & long-term benefits
 - ✓ Avoids the need for clean fuel investments
- Significant reductions in energy
- Pipeline gas largely eliminated from heating buildings by 2050

Existing Policy

- Energy code for new construction
- Performance standards for existing buildings over 20,000 square feet
- Appliance standards
- State-owned facilities



2021 State Energy Code

70% more efficient by 2031 over 2006 baseline RCW [19.27A.160](#)

2021 energy codes effective July 2023

Non-residential updates

- Electric heat pumps and HPWH for most space and water heating, some exemptions
- Solar readiness for commercial
- Other incremental efficiency improvements

Residential updates

- Electric heat pumps required for all space and water heating, with few exceptions
- Increased ventilation above natural gas stovetops
- EV-capable electric panels in new single-family homes

Clean buildings – Tier 1

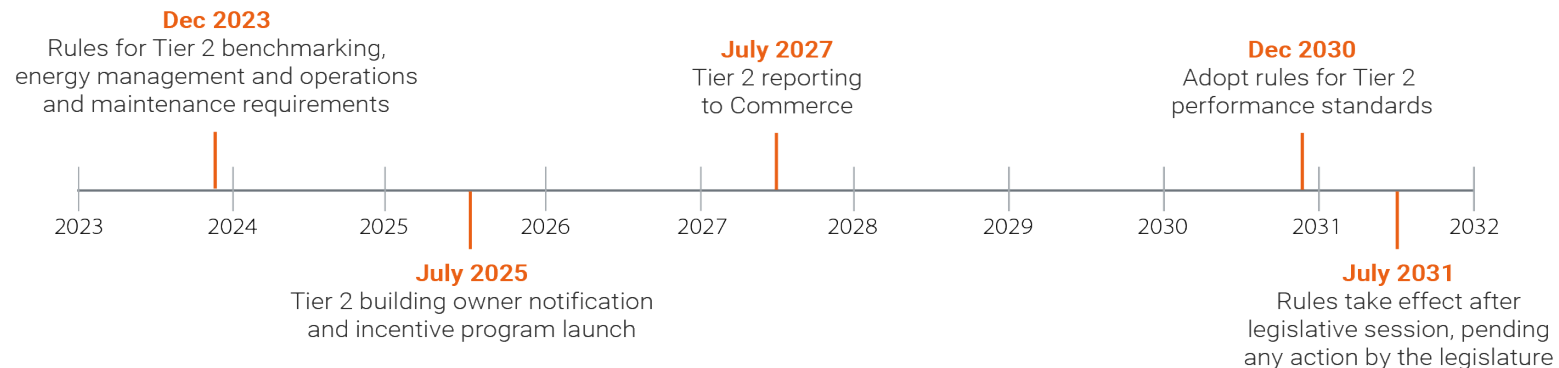
- Performance standards for existing large buildings over 50k sf
 - Energy management
 - Operations and maintenance
 - Benchmarking
 - Targets
- Incentive program
- Mandatory compliance



Clean buildings – Tier 2

- Buildings between 20-50k sf, including multifamily
- Not a performance standard until 2031
- Focus on benchmarking, energy and operations planning

Clean Buildings Expansion Timeline



Energy Efficient Appliances

Appliance standards represent a cost-effective strategy to protect consumers and businesses and strengthen Washington's clean energy economy.

- New in 2024: Adopted and updated standards for EVSE, air purifiers, commercial ovens, and more
 - HB 1619 standards expected to save Washington over \$344 million (2020\$) in net present value savings.
- First-in-nation water heater communications standard (CTA-2045) makes every water heater sold in the state a flexible storage opportunity (effective Jan. 1, 2023)
- Currently standards for 18 products in state statute

Federal funding

- **Inflation Reduction Act – \$163 million**
 - Whole home energy performance rebate (“HOMES”)
 - Rebates for modeled or measured energy efficient improvements in low and moderate income homes
 - Rebates for high efficiency electric equipment (“HEERP”)
 - Point of sale rebates for low and moderate income households
 - Tax credits for high efficiency electric equipment
 - Greenhouse gas reduction fund
- **IJA**
 - Technical Assistance for Resilient Codes Implementation (competitive)
 - Low-income weatherization funding (formula)

New Policy (2023 session)

- **HB 1390:** Provides a decarbonization pathway for campus district energy systems to comply with Clean Buildings standard
- **HB 1777:** Allows for EEaS for state-owned buildings and public schools
- Other efforts around net metering, an energy rebate navigator, and residential energy scoring did not reach the finish line.

Policy opportunities

- **Building standards for existing construction – less than 20,000 square feet**
 - Rental and affordable housing
 - Small businesses
- **Energy Codes**
 - Authority for local jurisdictions to adopt residential reach code, and support for local reach code resources
- **High efficiency electric equipment**
 - Access to cooling
 - Air quality during wildfire and extreme weather events
- **Filling gaps**
 - Technical Assistance for C-PACER
 - Training tomorrow's clean buildings workforce



Washington State
Department of
Commerce

www.commerce.wa.gov



www.commerce.wa.gov/energystrategy