Title: An act relating to reducing statewide greenhouse gas emissions by achieving greater
decarbonization of residential and commercial buildings.

Brief Description: Reducing statewide greenhouse gas emissions by achieving greater
decarbonization of residential and commercial buildings.

Sponsors: Representatives Ramel, Slatter, Johnson, J., Duerr, Fitzgibbon, Dolan, Chopp, Wylie,
Bateman, Ramos, Berry, Ortiz-Self, Gregerson, Goodman, Ryu, Valdez, Callan, Klobo,
Ormsby, Stonier, Fey, Macri, Peterson, Pollet, Bergquist and Harris-Talley; by request of
Office of the Governor.

Brief History:
Committee Activity:
Environment & Energy: 1/22/21, 2/9/21 [DPS].

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**Brief Summary of Substitute Bill**

- Requires that the State Energy Code, for each code cycle, provide one
reach code option for increasingly low-emission energy efficient homes
that local jurisdictions may adopt for residential construction.

- Allows local governments to adopt a reach code option under the State
Energy Code for residential buildings.

- Requires the Department of Commerce (Commerce) to adopt a state
energy management and benchmarking requirement for tier 2 and tier 3
covered commercial buildings by July 1, 2022.

- Prohibits a natural gas utility from offering new service to any customer
located outside of the area authorized in its approved certificate of public
convenience and necessity as of July 1, 2021.

- Requires that, beginning July 1, 2021, each gas company tariff for line

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*This analysis was prepared by non-partisan legislative staff for the use of legislative
members in their deliberations. This analysis is not part of the legislation nor does it
constitute a statement of legislative intent.*
extensions for residential and commercial gas service must recover the full cost of the extension from the customer requesting service.

- Requires the Utilities and Transportation Commission (UTC) to, by October 1, 2022, open an investigation to evaluate pathways for gas companies to achieve their proportional share of greenhouse gas emissions reduction required under statewide emissions limits.
- Codifies the requirement for natural gas utilities regulated by the UTC to develop integrated resource plans.
- Authorizes the governing body of a municipal electric utility or public utility district to adopt a beneficial electrification plan.
- Establishes a Heat Pump and Electrification Program within Commerce.

**HOUSE COMMITTEE ON ENVIRONMENT & ENERGY**

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 8 members: Representatives Fitzgibbon, Chair; Duerr, Vice Chair; Berry, Fey, Harris-Talley, Ramel, Shewmake and Slatter.

**Minority Report:** Do not pass. Signed by 5 members: Representatives Dye, Ranking Minority Member; Klicker, Assistant Ranking Minority Member; Abbarno, Boehnke and Goehner.

**Staff:** Nikkole Hughes (786-7156).

**Background:**

**Statewide Greenhouse Gas Emissions Limits.**

The state must limit anthropogenic emissions of greenhouse gases (GHGs) to achieve the following emission reductions:

- by 2020, reduce overall emissions of GHGs in the state to 1990 levels, or 90.5 million metric tons;
- by 2030, reduce overall emissions of GHGs in the state to 50 million metric tons, or 45 percent below 1990 levels;
- by 2040, reduce overall emissions of GHGs in the state to 27 million metric tons, or 70 percent below 1990 levels; and
- by 2050, reduce overall emissions of GHGs in the state to 5 million metric tons, or 95 percent below 1990 levels.

**State Energy Code.**
The State Energy Code (Code) is part of the State Building Code, which sets the minimum construction requirements for buildings in the state. The Code provides a maximum and minimum level of energy efficiency for residential buildings and the minimum level of energy efficiency for nonresidential buildings. The State Building Code Council (Council) maintains the Code. Unless otherwise amended by rule, the Code must reflect the 2006 edition.

The Code for residential structures preempts the residential energy code of each city, town, and county in Washington, unless the local jurisdiction's residential energy code exceeds the requirements of the Code and was adopted before March 1, 1990.

The Council reviews, updates, and adopts model state building codes every three years. The Code must be designed to:

- construct increasingly energy efficient homes and buildings that help achieve the broader goal of building zero-fossil fuel GHG emission homes and buildings by the year 2031;
- require new buildings to meet a certain level of energy efficiency, but allow flexibility in building design, construction, and heating equipment efficiencies within that framework; and
- allow space heating equipment efficiency to offset or substitute for building envelope thermal performance.

The Council must adopt state energy codes that require buildings constructed from 2013 through 2031 to move incrementally toward a 70 percent reduction in energy use by 2031. The Code must consider regional climatic conditions. The Council may amend the Code by rule if the amendments increase energy efficiency in the affected buildings.

Energy Benchmarking Requirements.

An electric or gas utility that serves more than 25,000 customers in the state must maintain records of the energy consumption data of all nonresidential and certain public agency buildings to which the utility provides service. This data must be maintained for at least the most recent 12 months in a format that is compatible with the United States Environmental Protection Agency's (US EPA) Energy Star Portfolio Manager, which is an Internet-based program that allows users to track their energy consumption data and to benchmark the energy use of their buildings against comparable buildings.

Upon the written authorization or secure electronic authorization of a nonresidential building owner or operator, the utility must upload the energy consumption data for the accounts specified by the owner or operator for a building to the US EPA Energy Star Portfolio Manager in a form that does not disclose personally identifying information.

An electric or gas utility that does not serve more than 25,000 customers in the state must either offer the upload service to the US EPA Energy Star Portfolio Manager or provide
customers who are building owners of covered commercial buildings with consumption data in an electronic document formatted for direct upload to the US EPA Energy Star Portfolio Manager. Within 60 days of receiving a written or electronic request and authorization of a building owner, the utility must provide the building owner with monthly energy consumption as required to benchmark the specified building.

"Covered commercial building" means a building where the sum of nonresidential, hotel, motel, and dormitory floor areas exceeds 50,000 gross square feet, excluding the parking garage area.

For any covered commercial building with three or more tenants, an electric or gas utility must, upon request of the building owner, provide the building owner with aggregated monthly energy consumption data without requiring prior consent from tenants.

Each electric or gas utility must ensure that all data provided in compliance with energy benchmarking requirements does not contain personally identifiable information or customer-specific billing information about tenants of a covered commercial building.

**Department of Commerce.**

The Department of Commerce (Commerce) must develop and implement a strategic plan for enhancing energy efficiency in and reducing GHG emissions from homes, buildings, districts, and neighborhoods. The strategic plan must be used to help direct the Code in achieving the goal of building zero-fossil fuel GHG emission homes and buildings by the year 2031. The strategic plan must identify barriers to achieving net zero energy use in homes and buildings and identify how to overcome these barriers in future Code updates and through complementary policies.

**Utilities and Transportation Commission.**

The Utilities and Transportation Commission (UTC) regulates the rates, services, and practices of investor-owned utilities and transportation companies, including electrical companies, natural gas companies, and telecommunications companies. The UTC is required to ensure that rates charged by these companies are "fair, just, and reasonable."

**Certificates of Public Convenience and Necessity.**

A natural gas utility may not operate a gas plant for hire in the state without having first obtained from the UTC a certificate declaring that public convenience and necessity requires or will require such operation and setting forth the area or areas within which service is to be rendered.

"Gas plant" includes all real estate, fixtures and personal property, owned, leased, controlled, used or to be used for or in connection with the transmission, distribution, sale or
furnishing of natural gas, or the manufacture, transmission, distribution, sale or furnishing of other types of gas, for light, heat, or power.

**Integrated Resource Planning.**

Under rules adopted by the UTC, each natural gas utility regulated by the UTC must develop an integrated resource plan (IRP) describing the mix of natural gas supply and conservation designated to meet current and future needs at the lowest reasonable cost to the utility and its ratepayers.

**Natural Gas Conservation Standard and Renewable Natural Gas Programs.**

Each natural gas utility must identify and acquire all conservation measures that are available and cost-effective. Each company must establish an acquisition target every two years and must demonstrate that the target will result in the acquisition of all resources identified as available and cost-effective. The cost-effectiveness analysis must include the societal costs of GHG emissions. The targets must be based on a conservation potential assessment prepared by an independent third party and approved by the UTC. Conservation targets must be approved by order of the UTC. The initial conservation target must take effect by 2022.

A natural gas utility may propose a renewable natural gas program under which the company would supply renewable natural gas for a portion of the natural gas sold or delivered to its retail customers. The renewable natural gas program is subject to review and approval by the UTC. The customer charge for a renewable natural gas program may not exceed 5 percent of the amount charged to retail customers for natural gas. The environmental attributes of renewable natural gas must be retired using procedures established by the UTC and may not be used for any other purpose. The UTC must approve procedures for banking and transfer of environmental attributes.

Each natural gas utility must offer by tariff a voluntary renewable natural gas service available to all customers to replace any portion of the natural gas that would otherwise be provided by the natural gas utility. The tariff may provide reasonable limits on participation based on the availability of renewable natural gas and may use environmental attributes of renewable natural gas combined with natural gas. The voluntary renewable natural gas service must include delivery to, or the retirement on behalf of, the customer of any environmental attributes associated with the renewable natural gas.

"Renewable natural gas" means a gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, and anaerobic digesters.

**Societal Costs of Greenhouse Gas Emissions.**
For the Natural Gas Conservation Standard, the cost of GHG emissions resulting from the use of natural gas, including the effect of emissions occurring in the gathering, transmission, and distribution of natural gas to the end user, is equal to the cost per metric ton of carbon dioxide emissions, using the 2.5 percent discount rate, listed in Table 2, *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866*, published by the Interagency Working Group on Social Cost of Greenhouse Gases of the United States Government, August 2016. The UTC must adjust the cost to reflect the effect of inflation.

The UTC must monitor the GHG emissions resulting from natural gas and renewable natural gas delivered by each natural gas utility to its customers, relative to the proportionate share of the state's GHG emissions reduction goal. The UTC must report to the Governor by January 1, 2020, and every three years thereafter, an assessment of whether the gas companies are on track to meet a proportionate share of the state's GHG emission reduction goal.

**Municipal Electric Utilities and Public Utility Districts.**

Municipalities are authorized to operate as utilities and set the rates and charges for the provision of water, sewer, electric power, heating fuel, solid waste removal, and transportation facility services. Public utility districts (PUDs) are a type of special-purpose district authorized for the purpose of generating and distributing electricity, providing water and sewer services, and providing telecommunications services. A PUD may operate on a countywide basis or may encompass a small jurisdiction. A PUD is governed by a board of either three or five elected commissioners.

Municipal electric utilities are authorized to provide electric service both within and outside of their jurisdictional boundaries. Some municipal electric utilities provide electricity to adjoining areas, both to incorporated cities and to unincorporated areas under county authority.

A PUD may build and operate generation, distribution, and transmission facilities, both within and outside the county boundary, to furnish electricity to the county's inhabitants or other persons, provided that such activity is reasonably related to the PUD's core purpose of serving its own customers. If a PUD wants to build a utility plant inside a city or town, the city's governing body must consent to the service and approve the plan for construction.

**Electrification.**

The governing body of a municipal electric utility or a PUD may adopt an electrification of transportation plan that, at a minimum, establishes a finding that utility outreach and investment in the electrification of transportation infrastructure does not increase net costs to ratepayers in excess of 0.25 percent.
Upon making a net cost determination, a municipal electric utility or a PUD may offer incentive programs in transportation electrification for its customers, including the promotion of electric vehicle adoption and advertising programs that promote the utility's services, incentives, or rebates.

Summary of Substitute Bill:

State Energy Code.

The State Energy Code (Code) must be designed to, for each code cycle, provide one reach code option for increasingly low-emission energy efficient homes that local jurisdictions may adopt for residential construction, to be enforced by the local jurisdiction.

Local governments may adopt the reach code option for residential buildings.

Energy Management and Benchmarking Requirements.

By July 1, 2022, the Department of Commerce (Commerce) must adopt by rule a state energy management and benchmarking requirement for tier 2 and tier 3 covered commercial buildings. In establishing the energy management and benchmarking requirement, Commerce must adopt requirements for building owner implementation based on sections 5, 6, and 7 of ANSI/ASHRAE/IES standard 100-2018, or more recent version, limited to energy management planning, operations and maintenance planning, and energy use analysis through benchmarking and associated reporting and administrative procedures. Administrative procedures must include exemptions for financial hardship.

"Tier 2 covered commercial building" means a building where the sum of nonresidential, hotel, motel, and dormitory floor areas exceeds 25,000 gross square feet, excluding the parking garage area, but does not exceed 50,000 gross square feet.

"Tier 3 covered commercial building" means a building where the sum of nonresidential, hotel, motel, and dormitory floor areas exceeds 10,000 gross square feet, excluding the parking garage area, but does not exceed 25,000 gross square feet.

By July 1, 2023, Commerce must provide the owners of tier 2 covered commercial buildings with notification of requirements. By July 1, 2024, Commerce must provide the owners of tier 3 covered commercial buildings with notification of requirements.

Owners of tier 2 covered commercial buildings must submit reports of compliance by July 1, 2025, and every five years thereafter. Owners of tier 3 covered commercial buildings must submit reports of compliance by July 1, 2026, and every five years thereafter.

By July 1, 2027, Commerce must evaluate benchmarking data to determine energy use
averages by building type. Commerce must submit a report to the Legislature and the Governor by October 1, 2027, with recommendations for building performance standards for tier 2 and tier 3 covered commercial buildings. The report must include information on the cost to building owners, by building occupancy type. Commerce is authorized to adopt rules for inclusion of tier 2 and tier 3 covered commercial buildings in the State Energy Performance Standard for commercial buildings.

Certificates of Public Convenience and Necessity.

A natural gas utility may not offer new service to any customer located outside of the area authorized in its approved certificate of public convenience and necessity as of July 1, 2021.

Provision of Energy Services in the State.

The Legislature declares that it is the policy of the state to:

• maintain and advance the efficiency and availability of energy services to the residents of the State of Washington;
• ensure that customers pay only reasonable charges for energy services;
• permit flexible pricing of energy services; and
• limit and reduce the use of fossil fuels for space and water heating and advance the use of high-efficiency electric equipment.

Each gas company must operate and plan in a manner that is consistent with the public interest, including:

• providing energy services to customers that are reliable and reasonably priced;
• preserving and advancing the equitable distribution of energy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health, economic, and environmental benefits and the reduction of costs and risks; and energy security and resiliency; and
• contributing to meeting the state's environmental and climate obligations, including the statewide greenhouse gas (GHG) emissions limits.

The Utilities and Transportation Commission (UTC) must consider and incorporate these public interest requirements in its regulation and oversight of the rates, charges, rules, regulations, and practices of each gas company.

Transition Implementation Plans.

By October 1, 2022, each gas company must develop and submit to the UTC a transition implementation plan to achieve a reduction in GHG emissions, consistent with its proportional obligation under the statewide GHG emissions limits, resulting from combustion of natural gas sold or delivered by the company. Gas companies may develop and file plans individually or collectively. Starting in 2025, each gas company must provide updates to its transition implementation plan as part of its integrated resource plan.
(IRP) filed with the UTC.

A transition implementation plan must:

- identify specific actions to achieve the gas company's share of the statewide GHG emissions limits and must include an estimate of the costs and benefits resulting from the transition, including the costs and benefits that will accrue to vulnerable populations and highly impacted communities;
- consider recommendations from the State Energy Strategy;
- consider indoor air quality impacts, especially for low-income customers, vulnerable populations, and highly impacted communities; and
- identify changes to depreciation schedules or rate design to be consistent with specific actions in the transition implementation plan.

Each gas company must ensure an equitable transition of the gas system by:

- ensuring that the transition positively impacts low-income households or highly impacted communities;
- ensuring the equitable distribution of energy and nonenergy benefits;
- reducing current and future energy burdens, such as by prioritizing rate management and assistance measures for low-income households;
- considering the impacts on small businesses, especially those owned by and serving low-income households and vulnerable populations, and providing support to assist small businesses in the transition;
- conferring with and taking into account the unique needs and requirements of tribal communities with respect to tribal sovereignty, traditional practices and customs, impacts on tribal lands, the inclusion of tribal workers and contractors on transition projects, and other impacts of the transition;
- including provisions for equity and opportunity improvement with respect to workforce development;
- providing for the just transition of affected workers through layoff avoidance strategies; and
- developing a contractor inclusion plan in coordination with an outside coalition of groups that works to support the inclusion and development of minority-owned businesses in clean energy and construction projects.

By October 1, 2022, the UTC must open an investigation to evaluate pathways for gas companies to achieve their proportional share of GHG emissions reduction required under the statewide limits. The investigation should consider implications, findings, and program adjustments in the gas company transition implementation plans submitted to the UTC.

The investigation should include, but not be limited to certain components, such as:

- financial impacts on gas companies;
- considerations related to the continued safe operation of the gas system;
- strategies to minimize costs and maximize benefits to customers, especially vulnerable populations and highly impacted communities;
• health impacts of the transition of the gas system;
• impacts of the transition of the gas system on the infrastructure, supply needs, and reliability of electric utilities; and
• an economic assessment of strategies that allow gas companies to repurpose gas system infrastructure.

The UTC must report the results of the investigation to the appropriate committees of the Legislature by January 1, 2024.

**Integrated Resource Plans.**

The requirement for natural gas utilities regulated by the UTC to develop IRPs is codified. At a minimum, a natural gas utility's IRP must include:

• a range of forecasts of future natural gas demand in firm and interruptible markets for each customer class that examine the effect of economic forces on the consumption of natural gas and that address changes in the number, type, and efficiency of natural gas end uses;
• an assessment of commercially available conservation, including load management, as well as an assessment of currently employed and new policies and programs needed to obtain the conservation improvements;
• an assessment of gas supplies, including fossil natural gas and all commercially available forms of renewable natural gas;
• an assessment of the impact of the electrification of the building sector;
• an assessment of opportunities for using company-owned or contracted storage;
• an assessment of pipeline transmission capability and reliability;
• a comparative evaluation of the cost of natural gas purchasing strategies, electrification, storage options, delivery resources, and improvements in conservation using a consistent method to calculate cost-effectiveness;
• the integration of demand forecasts and resource evaluations into a 10-year, long-range plan;
• a short-term plan outlining the specific actions to be taken by the utility in implementing the long-range IRP during each of the three years following plan submission;
• a report on the utility's progress toward implementing the recommendations contained in its previously filed plan;
• an assessment of the economic, public health, and environmental conditions within the utility's service territory; and
• an assessment of the energy and nonenergy benefits and burdens associated with the utility's infrastructure and programs.

The UTC must establish, by rule or order, the schedule for each gas company regulated by the UTC to file an IRP at least every four years. The gas company must provide a work plan for informal UTC review no later than 12 months prior to the due date of the IRP.
Beneficial Electrification.

The governing body of a municipal electric utility or public utility district (PUD) may adopt a beneficial electrification plan that establishes a finding that utility outreach and investment in the electrification of homes and buildings will provide net benefits to the utility. Prior to adopting a beneficial electrification plan, the governing body must request the input of any natural gas utility serving customers in the electric utility's service area on the development of the plan.

An adopted beneficial electrification plan must identify options and program schedules for the electrification of various energy end-uses or other energy sources. In adopting the plan, the governing body must determine that the sum of the benefits of an electrification option equals or exceeds the sum of its costs. As part of this determination, the governing body may differentiate the level of benefits and costs accrued to highly impacted communities and vulnerable populations in the electric utility's service area.

Nothing in the authority to develop beneficial electrification plans limits the existing authority of a municipal electric utility or PUD to offer incentives and other programs to accelerate the electrification of homes and buildings for its customers if such electrification is in the direct economic interest of the electric utility.

"Beneficial electrification" means electrification of an energy end-use in a way that provides a net benefit to the utility.

Heat Pump and Electrification Program.

A Heat Pump and Electrification Program (HPE Program) is established within Commerce. The purpose of the HPE Program is to support job creation and workforce development through the transition of residential and commercial buildings away from fossil fuels and GHG emissions by providing incentives, education, and outreach resources for the installation of high-efficiency electric heat pumps and other electric equipment.

Among the required components of the HPE Program is the development and implementation of an incentive program for residential and commercial building owners that convert from a fossil fuel space or water heating system to a high-efficiency electric heat pump. In developing the incentive, Commerce must implement higher payments for those with low or moderate incomes, residents or owners of rental properties, and other populations who may be overburdened and vulnerable.

Commerce is authorized to contract with a nonprofit trade association, regional market transformation organization, or community organization to implement the HPE Program.

Short Title.
This act may be known and cited as the Healthy Homes and Clean Buildings Act.

Severability.

If any provision of the act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

Substitute Bill Compared to Original Bill:

The substitute bill makes the following changes to the original bill:

- removes the requirement that residential and nonresidential construction permitted under the 2027 State Energy Code achieve at least a 70 percent reduction in annual net energy consumption and eliminate on-site fossil fuel combustion for space heating and water heating, restoring the current-law requirements for the 2031 State Energy Code;
- requires that the State Energy Code, for each code cycle, provide one reach code option for increasingly low-emission energy efficient homes that local jurisdictions may adopt for residential construction;
- requires the Department of Commerce to adopt a state energy management and benchmarking requirement for tier 2 and tier 3 covered commercial buildings by July 1, 2022, rather than by November 1, 2021;
- requires that, beginning July 1, 2021, each gas company tariff for line extensions for residential and commercial gas service must recover the full cost of the extension from the customer requesting service;
- establishes provisions pertaining to the public interest in the operation and planning of gas companies;
- removes reference to a Statewide Clean Heat Standard and amends requirements for the development of transition implementation plans;
- requires the Utilities and Transportation Commission (UTC) to, by October 1, 2022, open an investigation to evaluate pathways for gas companies to achieve their proportional share of greenhouse gas emissions reduction required under statewide emissions limits;
- removes the requirement that the UTC establish a uniform climate protection surcharge for natural gas utilities by January 1, 2023;
- amends requirements for gas company integrated resource plans; and
- specifies that requirements to develop transition implementation plans and integrated resource plans do not apply to municipally owned and operated gas utilities.

Appropriation:  None.

**Effective Date of Substitute Bill:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) This bill steadily decarbonizes the state's building sector. Washington's utilities have led the nation in energy efficiency for years. This bill also creates a path for decarbonization through incentives. This bill is committed to justice in the transition for workers, and creates new jobs and new construction works with a commitment to high labor standards. All the benefits of natural gas can be provided by electricity today. Nine-hundred million tons of carbon dioxide equivalents are emitted each year due to heating with natural gas in the state. This bill ensures that gas utilities are in the driver's seat in transitioning to a low or zero-carbon gas system. This bill extends the state's existing clean building standard to apply to buildings bigger than 10,000 square gross feet. This bill provides local governments with the tools they need to initiate the transition to a clean energy buildings sector. Building all-electric homes costs less than building homes and connecting them to natural gas. Installing ductwork for forced air furnaces adds to the cost of construction. All-electric homes are safer and better for residents' health. There is an emergency 911 call concerning gas leaks every three days in the Seattle area. All-electric buildings are not only cheaper to construct, but they are more resilient in the event of natural disasters such as seismic events. Buildings are the fastest growing source of carbon emissions in the state. Children growing up in homes with natural gas stoves have a 40 percent greater risk of developing asthma. The bill has the potential to reduce energy burdens for low-income residents.

(Opposed) Natural gas utilities do have a role to play in our clean energy future, but this bill is not the answer. System reliability is a concern with increased electric load. For an average home, conversion costs were quoted between $11,000 and $21,000. This bill would drive up costs for customers and put natural gas employees across Washington out of a job. This bill puts energy reliability at risk and more than doubles electricity demand during the state's winter peak. The natural gas system is an energy delivery system; the product delivered can and will change. Food producers in the state rely on low-cost energy. We cannot take a healthy grid for granted. There are certain industries where natural gas is the only fuel source available. The Northwest is expected to be approximately 2 gigawatts short of meeting energy needs within the next decade. Electrification is not the only way to achieve greenhouse gas emissions reductions. Natural gas provides backup power for other vital utility services. This bill creates inconsistencies among local energy codes.

**Persons Testifying:** (In support) Representative Ramel, prime sponsor; Jim Lazar; Patrick Serfass, American Biogas Council; Chris Covert-Bowlds, Washington Physicians for Social Responsibility; Aaron Fairchild, Green Canopy; Chris Hellstern, Miller Hull; Johnny Kocher, Rocky Mountain Institute; Kelly Hall, Climate Solutions; Mariel Thuraisingham, Front and Centered; Chris Van Daalen, Northwest EcoBuilding Guild; Jessica Finn Coven,
Office of Sustainability and Environment; Debra Smith, Seattle City Light; Michael Furze and Emily Salzberg, Department of Commerce; Dave Danner, Utilities and Transportation Commission; and Seth Fleetwood, City of Bellingham.

(Opposed) Ed Hawthorne and Jan Molinaro, City of Enumclaw; Greg Hanon, NAIOP; Bill Stauffacher, Building Industry Association of Washington; Kurt Swanson and Leanne Guier, United Association of Plumbers and Pipefitters; Mary Moerlins, Northwest Natural; Peter Godlewski, Association of Washington Business; Dan Kirschner, Northwest Gas Association; Brandon Houskeeper, Alliance of Western Energy Consumers; Nicole Kvisto, Alyn Spector, and Kathy Bergner, Cascade Natural Gas; Janet Kelly, Puget Sound Energy; Trevor Smith, Laborers' International Union of North America Local 292; and Mike Brown, International Brotherhood of Electric Workers 77.

**Persons Signed In To Testify But Not Testifying:** Lisa Parshley, City of Olympia; Michele Woodhouse; Mel Sorensen, Pacific Propane Gas Association; Melissa Olson Frause, Bob's Heating and Air Conditioning; Heather Rosentrater, Avista; Carolyn Logue, Washington Air Conditioning Contractors Association and Northwest Hearth, Patio, and Barbecue Association; Jonathan Lewis, Klickitat Valley Health; Geoff Glass, Providence; Darin Yusi, City of Ellensburg; Shawn Osborne, Rinnai; Grant Falco, Falco's; Tim Reed, Reed Marketing LLC; Nicolas Garcia, Washington Public Utility Districts Association; Andrew Shumway; Steven Tate, Fireside Home Solutions; Richard May; Jerry VanderWood, Associated General Contractors of Washington; Michael Mann, Sustainable Living Innovations; and Jeanette McKague, Washington REALTORS.