ReBuild Policy Package

March 14th, 2023

HEALTHY + EFFICIENT BUILDINGS



- Oregon's buildings sector is the state's second highest source of climate emissions
- Generates 34% of emissions as of 2021
- Buildings can also provide shelter from climate harms, including heatwaves and wildfire smoke
- Efficiency improvements are least-cost, low-risk pathways to decarbonizing buildings

Resilient Efficient Buildings (REBuilding) Task Force

Established by **SB 1518** (2022):

"The task force shall:

Identify and evaluate policies related to building codes and building decarbonization for new and existing buildings that would enable this state to meet the greenhouse gas emissions reduction goals set forth in ORS 468A.205 while maximizing additional benefits, such as increasing energy efficiency, improving resilience against climate change, improving public health and air quality, [. . .]

Make policy recommendations for legislation to interim committees of the Legislative Assembly related to the environment before the 2023 regular session of the Legislative Assembly [. . .]"

2023 Resilient Efficient Buildings Package

- Policy Framework:
 - Set policy that creates the structure for Oregon to draw down federal dollars, and achieve strong efficiency and decarbonization gains for Oregonians
 - Actions with the largest potential energy savings
- SB 868: Healthy Heating and Cooling for All
 - Aligns energy efficiency programs with state climate goals, sets a heat pump target for the state, supports workforce development, and improves navigation of federal and state incentives for energy efficiency and retrofits of homes and businesses.
- SB 869: Build Smart from the Start
 - Ensures new buildings in Oregon are constructed energy efficiently and are more resilient to climate impacts.
- SB 870: Building Performance Standard
 - Establishes a Building Performance Standard for large commercial buildings to reduce their energy use and climate emissions over time.
- SB 871: Smart State Buildings
 - Removes barriers to accelerate energy retrofits and upgrades in state buildings.
- HB 3166: Navigation
 - Encourage interagency collaboration to simplify and streamline the ability of Oregonians to access incentives for energy efficiency and home health and safety projects

SB 868 Healthy Heating and Cooling for All - Problem

- Too many Oregonians are living with outdated, inefficient and carbon-intensive heat sources. Further, too many Oregonians are living without access to cooling in their homes, despite increasing risks of fire, smoke, and devastating heat.
- Space and water heating make up 64% of an average residential building's energy use.
- Environmental Justice Communities, including rural, low-income, and BIPOC
 Oregonians are more likely to be without cooling, without efficient heating, and
 facing disproportionate energy cost burdens.
- Federal opportunities coming our way will open the door to more Oregonians who may not have been otherwise able to access efficiency upgrades

SB 868 Healthy Heating and Cooling for All - Solution

- Set a state heat pump deployment target of 500,000 new heat pumps installed by 2030, with a priority for low-income and environmental justice communities throughout the state. With reports to the legislature on progress, barriers, and market factors.
- Align new and existing programs related to the resilience, energy efficiency and greenhouse gas emissions of homes and buildings with state climate goals
- Align state incentives and other programs related to home upgrades and efficiency with new Federal incentives, to maximize Oregon's allocation and make best use of state funds.
- Improve workforce and contractor training, education for stakeholders of all types and public awareness of incentives, programs, rebates and installation needs of heat pumps and other energy efficiency upgrades.

SB 868 Healthy Heating and Cooling for All - Summary of Upcoming Changes

- Update the problem language to reflect latest DEQ data
- Include definitions for heat pumps and heat pump technologies
- Adjust definition of GHG reduction goal for consistency across the package
- Clarify the intent for ODOE and other named agencies to work in collaboration to identify barriers and align new and existing programs with GHG goals, and with each other
- Clarify that ODOE may report heat pump goal progress as a part of existing reports relating to heat pumps, home energy efficiency and the Biennial Energy Report.
- Clarify that both financial and non-financial barriers to heat pump adoption and energy efficiency upgrades should be identified and reduces where possible.
- Clarify that CBOs should be included as stakeholders
- Remove some of the duplication with <u>HB 3166</u>, relating to the creation of a new navigation program.

SB 869: Build Smart from the Start - Problem

- Approximately a third of buildings that will exist in Oregon in 2050 have yet to be built and will last for decades.
- To meet our climate goals, and ensure ongoing affordability for Oregonians, we need to have high standards for energy efficiency.
- With impacts of climate change on Oregonians growing worse each year, improvements can be made on how we currently construct new homes and buildings to keep Oregonians safer from increased incidents of extreme heat, wildfire smoke, water shortage, and other harms.
- With the increased frequency of dangerous smoke levels, and rising concerns about indoor air quality, further work on ventilation and air cleaning standards is needed to ensure safety and comfort of Oregonians.

SB 869: Build Smart from the Start - Solution

- Codify BCD's mission as established in Executive Order 20-04 to work towards the state's greenhouse gas emissions goals through energy efficiency improvements in the building code, while maintaining alignment with national professional industry standards.
- Direct BCD, in coordination with DEQ to investigate the feasibility and benefits of reducing building related emissions through embodied carbon.
- Direct BCD to study possible updates to ventilation and air cleaning standards for indoor air quality.

SB 869: Build Smart from the Start - Upcoming Changes

- Adjust the definition of greenhouse gas goals for consistency across the package.
- Clarify the scope of what is being asked of BCD and their connection to DEQ:
 - Align language with EO 20-04 to improve clarity for the agency and minimize duplicative work and reporting
 - Continue energy efficiency work as they have been going to comply with EO 20-04
 - Continue balancing costs and safety as they do in current process with an overlay of GHG reduction goals
 - BCD and DEQ will work together on investigating and reporting potential opportunities to address GHG emissions through the building codes or other means, and will utilize DEQ's existing body of work where possible in that process.

SB 870: Building Performance Standard - Problem

- Much of Oregon's commercial building space was constructed prior to adopting newer, more energy-efficient state building codes.
- Older buildings consume more energy and produce more carbon emissions than newer buildings, leading to higher energy bills and more pollution.
- Older buildings also face more barriers to efficiency upgrades, but are an essential opportunity for reductions if the State is going to meet its emissions targets, and for the resilience, sustainability and durability of our built environment.
- Six percent of buildings represent approximately 50 percent of floor space nationally, according to the <u>U.S. EIA</u>.
- In Portland, buildings over 35,000 sqft (only 592 buildings) makeup 92% of commercial square footage.

SB 870: Building Performance Standard - Solution

- Making improvements to a relatively small number of buildings can have a big impact on overall energy savings and climate pollution reduction.
- A Building Performance Standard (BPS) would require large commercial buildings to meet energy and emissions reduction targets over time from a flexible menu of improvements. Modeled after <u>Washington State BPS</u>, which passed in 2019, with modifications to suit Oregon's landscape.
- Provide long-term certainty, helping building owners plan for upgrades that improve their buildings and stimulate the local economy and create local, family-wage jobs across the state that can't be outsourced.
- Provide financial incentives and technical assistance for building owners taking early action to meet these standards before they are required to be met.

SB 870: Building Performance Standard - Who's in?

Tier 1: subject to the BPS

 Tier 1 covered commercial building means a building in which the sum of gross floor space for hotel, motel and nonresidential use exceeds 35,000 square feet, excluding any parking garage

Tier 2: subject to benchmarking standards, but not compliance with the BPS

- Multifamily residential buildings, hospitals, schools, dormitories, and university buildings where floor areas are equal to or exceed 35,000 gross square feet, excluding the parking garage area and;
- A building where the sum of nonresidential, hotel, and motel floor areas exceeds 20,000 gross square feet, but does not exceed 35,000 gross square feet, excluding the parking garage area.

SB 870: Building Performance Standard - Context

20,000 square feet is the average size of a modern high rise in the US, most buildings will not have to meet the BPS

In the BPS

38,000 sqft: The Solterra Building on SE Division in PDX



20,000 sqft:Tanasbourne
Professional Center

Out of the BPS





52,000 sqft:Crane Shed
Commons in Bend



4,000 sq feet: Domino's Pizza in Dallas, OR

SB 870: Building Performance Standard - Upcoming Changes

- Lead agency changed to Department of Energy, Building Codes Division to consult
- Definition of Ag. Building aligned with Oregon statutes
- Creation of a Tier 1 and Tier 2 covered buildings distinction (similar to Washington)
 - Tier 1 buildings will be required to meet the BPS (Buildings 35,000 sqft or more)
 - Tier 2 buildings will be required to meet benchmarking requirements (energy use reporting)
 - Both Tier 1 and Tier 2 buildings will be eligible for early adopter incentives
- ODOE will be asked to consider federal and local requirements in establishing the BPS to limit duplication of reporting and other requirements for buildings
- Energy use intensity will exclude transportation (charging) to avoid disincentivizing installation of EV charging
- ODOE will convene a Rulemaking Advisory Committee which includes covered building owners to improve the responsiveness of the program and standard to the needs of the covered entities
- Dates removed from ASHRAE standards to allow ODOE flexibility to consider upcoming updates to relevant ASHRAE standards
- Rulemaking timeline extended to give ODOE 18 months to establish rules
- Incentive program added which mirrors Washington but is not tied to utilities (their utility system and particularly utility incentive programs are different than ours) ODOE will design the program.

SB 871: Smart State Buildings - Problem

- State buildings can lead by example, and demonstrate how increasing resilience and efficiency and transitioning to clean energy is feasible, affordable, and beneficial. Oregon should follow through with its commitment to contribute to the state's climate goals and hold itself to the same standards as private industry for energy efficiency, and carbon reduction in buildings.
- While the Department of the Treasury and some others have made significant efforts to design new state buildings with efficiency and resilience in mind, many existing state buildings lag behind industry standards.
- These environments are often hard on workers because of the outdated heating, cooling and ventilation.

SB 871: Smart State Buildings - Solution

- Make sure the State has the tools it needs to achieve energy efficiency gains
- Allow state agencies to utilize performance contracting
- Allow agencies to retain the cost savings from their energy efficiency projects
- Streamline ODOE and DAS guidance for energy efficiency

SB 871: Smart State Buildings - Upcoming Changes

- DAS and ODOE have significant bodies of work relating to the efficiency of state buildings, but few timelines or other statutory tools to help bring agencies along with them.
- Ease the ability of public buildings to fund energy efficiency and retrofit projects, and allow Oregon to adopt statutes/rules to those that have proved impactful in other jurisdictions, driving down climate pollution, improving energy efficiency, and providing resilient public spaces for all Oregonians.
- Reduce barriers to third party financing of public buildings to account for the energy savings of the whole building and throughout the life of energy efficiency upgrade components.
- Align the cost-effectiveness criteria under performance contracting with state statutes, rules, and efficiency and emissions goals.
- Streamline the role DAS plays in Agency builds and retrofits, to ensure greater consistency of energy standards, and greater participation by agencies in existing state energy efficiency programs.
- Allow agencies to retain the cost savings from energy efficiency investments.
- Direct Oregon, through DAS, to join the <u>national building performance coalition</u>, which will open up more opportunities for technical assistance and collaboration with other states doing energy efficiency work.

HB 3166: Navigation

- A Tsunami of Federal Funding is coming our way
- State Programs need to be aligned in leveraging those opportunities
- Oregonians need to understand what is available and how they can access it
- HB 3166 would create a one-stop-shop for Oregonians to access information about incentives and other programs

Thank You