



TASK FORCE ON RESILIENT EFFICIENT BUILDING MEETING SUMMARY

81st Legislative Assembly
2021-2022 Interim

Attendees	Senator Kate Lieber, Co-Chair Representative Pam Marsh, Co-Chair Senator Lynn Findley Representative Mark Owens Neil Baunsgard Alex Boetzel Don Bohn Anjeanette Brown Ashley Buchanan Meredith Connolly Chris Forney	Kim Heiting David Heslam Bob Jenks Scott Linfesty Jeff McGillivray Tricia Mooney Jairaj Singh Eli Spevak Matt Tidwell Lucy Vinis Bob Westerman																
Absent	Andrew Beyer Ernesto Fonseca Elliott Gall Mike Goodrich Jay Hansen																	
Date/Time	3:00 pm, Tuesday, May 31, 2022 (recording).																	
Meeting Topics	Welcome and Agenda Review <ul style="list-style-type: none">Last meeting recapReview of today’s agenda and discussion guidelines Baseline: Where the Building Sector is Today <ul style="list-style-type: none">Distribution of homes by vintage:<table><tr><td>Pre 1951</td><td>1951-1960</td><td>1961-1970</td><td>1971-1980</td><td>1981-1990</td><td>1991-2000</td><td>2001-2010</td><td>Post 2010</td></tr><tr><td>31%</td><td>9%</td><td>9%</td><td>14%</td><td>8%</td><td>15%</td><td>10%</td><td>5%</td></tr></table>*Joint Task Force on Resilient Efficient Building - Group Presentation no. 2, Slide 8Typically, older buildings consume more energy and often have more significant barriers to energy upgrades.Over 85 percent of Oregon’s single-family residences were built prior to 2000, before the prevalence of energy codes.Split incentives in renter-occupied buildings make energy improvements more complicated and jurisdictions with high proportions of rental units should consider strategies targeted at renters.Large energy consumers (of both electricity and natural gas) in the commercial sector are office, retail, mixed commercial, and restaurant.Policies can be targeted towards high-impact segments of the		Pre 1951	1951-1960	1961-1970	1971-1980	1981-1990	1991-2000	2001-2010	Post 2010	31%	9%	9%	14%	8%	15%	10%	5%
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- commercial sector, rather than treating all buildings the same.
- Outputs from the Transformational Integrated Greenhouse Gas Emissions Reduction (TIGHGER) analysis will be available in July and will include: predictions of carbon emissions from the electric sector and gas infrastructure decarbonization, predictions of new construction for commercial and residential starts, and cost of various decarbonization scenarios.

National Landscape on Building Decarbonization Policies: Examples in other States

- Overview of recent building decarbonization legislation in New York, Maryland, Colorado, and Washington.

EB NC ALL	New York	Maryland	Colorado
State Government	CLCPA goals, New Efficiency: New York includes ZNE/Zero Carbon targets	HB 662 (2020) sets EE requirements and energy performance contracts, state buildings are annually benchmarked	Series of EOs (most recent is EO D 2019 016) with GHG and energy reduction targets, RE targets
Financial Tools and Incentives	New York Green Bank, Green Jobs New York, many incentive programs through NYSERDA; PACE, ESPCs (through NYPA) for state-owned buildings	Utility incentive and rebate programs; PACE, EPCs for state-owned buildings	State mortgage and loan programs, utility incentive and rebate programs; PACE, EPCs for public projects
Building Energy Codes	2018 IECC (residential), 2018 IECC or ASHRAE 90.1-2016 (commercial)	2018 IECC with amendments (residential), 2018 IECC and 90.1-2016 (commercial)	Homerule, adopted at local level (see changes in HB 22-1362)
Stretch Codes	NYStretch	None adopted statewide	None adopted statewide
Performance-Based Standards	None	Certain buildings over 35K sf under SB 0528 (detail on further slides)	HB21-1286 directs Task Force to develop recommendations
Benchmarking and Disclosure	State-owned facilities over 25k sq ft (annual)	SB 0528 requires reporting of direct emissions (onsite combustion), beginning in 2025	Required by HB21-1286 for buildings over 50K sf (with some exemptions for manufacturing, industrial or agricultural)
Equity/Workforce Development	Under CLCPA 40% of benefits of investments go to disadvantaged communities	Several recent laws (such as SB 516) include provisions for workforce development and training	Colorado WAP is running direct install ASHP pilot, several agencies are working with utilities on workforce training
Carbon Pricing	RGGI	RGGI	None

*Joint Task Force on Resilient Efficient Building - Group Presentation no. 2, Slide 16

- State government – actions that cover state-owned or leased buildings.
- Financial tools and incentives – loan instruments, incentive and rebate programs, utility programs, third party programs, property assessed clean energy (PACE) programs, and energy savings performance contracts or energy performance contracts (EPC).
- Building energy codes and stretch codes – energy requirements for major retrofits and new construction.
- Performance-based standards – covered buildings are required to be measured to energy or emission standards and take actions if the building does not meet the standard.
- Benchmarking and disclosure – require building owners to report annual energy consumption or emissions data for the purpose of disclosing it to allow the market to use it in transactional decisions.
- Equity/workforce development – quite a few laws focused in this area; presentation focused on programs designating certain percentages of program benefits towards disadvantaged communities and workforce development and training requirements.
- Carbon pricing – two of the states in the analysis are in the Regional Greenhouse Gas Initiative (RGGI) region.



- Climate Leadership and Community Protection Act ([New York, S6599, 2019](#)):
 - Commits to 100 percent zero-emissions electricity by 2040.
 - Sets statewide GHG reduction target of at least 85 percent below 1990 levels by 2050.
 - Requires that disadvantaged communities receive minimum of 35 percent (goal of 40 percent) of benefits from state's clean energy investments.
 - Requires Department of Environmental Conservation (DEC) to produce annual report on statewide GHG emissions.
 - Requires DEC to report progress toward GHG goals with recommended modifications every four years.
 - Requires state government climate and equity screen for all decisions.
- Climate Solutions Now Act of 2022 ([Maryland, SB 0528, 2022](#)):
 - Revises statewide GHG emissions goals to 60 percent below 2006 levels by 2031, net-zero by 2045.
 - Requires energy efficiency and emissions reductions for certain buildings.
 - Sets building performance standards for buildings over 35,000 square feet;
 - Requires reporting of direct emissions from heat beginning in 2025;
 - Covered buildings required to reduce direct emissions 20 percent below 2025 by 2030, achieve net zero direct emissions by 2040; and
 - Exempts historic properties, public/private elementary or secondary buildings, manufacturing buildings, and agricultural buildings.
 - Requires Public Service Commission and Building Codes Administration to study and make recommendations on the electrification of buildings; and
 - Requires Maryland Green Building Council to examine and report on specific items relating to state procurement of concrete.
- Energy efficient building codes ([Colorado, HB 22-1362, 2022](#)):
 - Requires appointment of energy code board to develop two model codes and requires local governments and certain state agencies to adopt and enforce codes consistent with model codes;
 - Creates Building Electrification for Public Buildings Grant Program: local governments, school districts, state agencies, special districts eligible to receive funding for high-efficiency electric heating (space, water), or cooking;
 - Creates High-Efficiency Electric Heating and Appliances Grant program: local governments, utilities, nonprofits, and housing developers eligible to install high efficiency electric heating equipment in multiple structures within a neighborhood; and



- Establishes Clean Air Building Investments Fund – funding for above (\$10 million for Public Buildings Grant program, ~\$11 million for High-Efficiency Electric Heating and Appliances Grant).
- EV-Ready Building Codes ([Colorado, HB22-1218, 2022](#))
 - Requires new and renovated commercial and multifamily buildings to be EV ready.
- Heat Pumps and Building Materials ([Colorado, SB22-051, 2022](#))
 - Creates 10 percent tax credit and state sales tax exemption for heat pump systems.
- Strong Communities and Affordable Housing ([Colorado, HB22-1304, 2022](#))
 - Invests: \$40 million in Strong Communities Grant Program, \$178 million for affordable housing, and
 - Includes land use and transportation-related provisions.
- Air Quality ([Colorado, SB22-193, 2022](#))
 - Most provisions are transportation-related; and
 - Included \$25 million in incentives for industry to go beyond EE/clean tech requirements.
- Washington State updated their [Energy Strategy](#) in 2021 with specific recommendations for buildings.
 - In 2019, the Washington State Legislature enacted Tier 1 of the State Clean Buildings Law, ([Washington, HB 1257, 2019](#)) which created performance standards for existing large (over 50,000 square feet) commercial buildings, with some exemptions like manufacturing and industrial. Compliance is required by 2027.
 - These Tier 1 buildings need to engage in energy management planning, operations and maintenance planning, and benchmarking.
 - Tier 1 buildings that exceed the target must make improvements to improve energy usage.
 - Complementary to the State Clean Buildings Law there is a \$75 million incentive fund for early adopters.
 - In 2022, Washington State enacted Tier 2 of the State Clean Buildings Law, which required buildings 20-50K square feet to do benchmarking, energy, and operations planning by 2027.
 - After the Tier 2 buildings have gone through the planning process in 2027, the Department of Commerce will make recommendations to the legislature on whether it should become a performance standard by 2031.
 - Energy Efficient Appliance Standards – Washington has standards for 18 products
 - Incentives:
 - [Clean Energy Fund](#),
 - [Building Electrification Program](#),
 - [Clean Buildings Incentive](#),
 - [Weatherization](#),



	<ul style="list-style-type: none"> ▪ Community Energy Efficiency Program, and ▪ Energy Retrofits for Public Buildings, <ul style="list-style-type: none"> • Energy Efficiency Grants, • Solar Grants, and • State Project Improvement Grants. <p>Task Force Discussion: What are the possible policy areas for Oregon?</p> <p>Discussion Questions:</p> <ul style="list-style-type: none"> • Considering the baseline in Oregon and examples from other states: <ul style="list-style-type: none"> ○ What potential policy areas or solutions would you want to see explored in Oregon? • Consider policy areas for: <ul style="list-style-type: none"> ○ New construction; ○ Existing buildings; and ○ All buildings (this could include building-related utilities actions, appliance standards, etc.). <p>Next Steps</p> <ul style="list-style-type: none"> • Next meeting: June 14, 3-5 pm • Individual meetings will be scheduled June 6-22 with Task Force members and facilitators.
<p style="text-align: center;">Issues Discussed</p>	<p>Baseline: Where the Building Sector is Today</p> <ul style="list-style-type: none"> • Interest in seeing: <ul style="list-style-type: none"> ○ distribution of homes since 2010; ○ additional information on data around older homes' energy use and square footage; ○ age of buildings with the four largest energy consumption categories; and ○ geographic, regional, or rural/urban distribution. • History of Oregon's energy code • Make up of emissions data and how it is reflected in the presentation • U.S. Green Building Council might be a possible source of more granular data to help consider different energy uses within buildings (stoves, lighting, heating, etc.). • How current policies are being factored into emission modeling and importance of looking at future of the electric grid and natural gas sector <p>National Landscape on Building Decarbonization Policies: Examples in other States</p> <ul style="list-style-type: none"> • PACE programs often enabled at state level with counties having the option to opt into the program. • Multnomah County has enacted Commercial PACE program.



	<ul style="list-style-type: none"> • Oregon will be added to the policy table and distributed to the Task Force members. • Nuclear power in energy mix in different states • Comparison of emission profiles of different states • Washington State Legislature stakeholder and decision-making process in adoption of the Washington State Clean Buildings Law • Important for building performance standard to consider size of buildings and the type of buildings, which was a challenge in Washington because they did not start with a statewide benchmarking law. • The type of improvements people make depends on the type of building; many will be able to get there by operations and maintenance, but some may be more substantial. • The Washington rules stipulate that a building owner cannot be required to replace a piece of equipment/appliance before the end of its useful life. • Other policies discussed by the Washington State Legislature and lessons learned <p>Task Force Discussion: What are the possible policy areas for Oregon?</p> <ul style="list-style-type: none"> • Considering compounding effect of emissions saved today look at: <ul style="list-style-type: none"> ◦ Emissions analysis around hybrid heating, E3 analysis; and ◦ Electric baseboard heating in new and existing building stock. It continues to be the primary source of electric heating, primarily in lower-income houses, and has twice the emissions and operation cost. • Evaluate scope of building codes process for new construction to be based on emissions rather than just energy. • Explore area of benchmarking to see what data Oregon has; typically two to three years is sufficient from a data-management perspective. • Awareness of implementation challenges and how long it takes to provide education. • Specific to new construction in Washington, electric resistance fixtures received negative points while a new heat pump received positive points. • Task Force members also provided feedback using Jamboard. • Broad Buckets: new buildings (including institutional buildings), existing buildings, and possible incentives.
<p>Meeting Materials (OLIS)</p>	<p> Joint Task Force on Resilient Efficient Building Presentation Washington State Landscape on Building Decarbonization Policies Jamboard Oregon Department of Environmental Quality (POST-MEETING FOLLOW-UP) </p>

