

EXECUTIVE ORDER NO. 17-20

ACCELERATING EFFICIENCY IN OREGON'S BUILT ENVIRONMENT TO REDUCE GREENHOUSE GAS EMISSIONS AND ADDRESS CLIMATE CHANGE

WHEREAS, climate change presents a significant threat to our livelihoods, economic security, environment, health, and well-being.

WHEREAS, there has been an increase in extreme weather events, including more frequent and intense heat waves and wildfires. According to the Oregon Climate Change Research Institute, the best available science indicates Oregon is experiencing serious impacts to its natural resources due to climate change.

- Water resources are being affected by decreased winter snowpack, changes to seasonal runoff patterns, decreased precipitation in Eastern Oregon, and increased intensity and occurrence of flooding.
- Agricultural resources are being affected by increases in temperatures, increased ocean acidification, and changes in ocean currents.
- The Oregon coastal region, stretching 363 miles, will be impacted by an expected rise in sea level between 7 and 23 inches.
- These impacts threaten the State's agricultural, fishing, timber, recreation, and tourism industries, thereby threatening the livelihood of the State's residents and an important source of Gross State Product for the state.
- Climate pollution is projected to create \$1.1 billion in health-related costs for Oregon families to bear by 2040, including asthma, heart disease, stroke, and cancer.

WHEREAS, energy efficiency leads to significant greenhouse gas reductions that are essential to meeting our state greenhouse gas reduction goals and addressing climate change.

WHEREAS, Oregon is committed to meeting the international Paris Agreement targets to reduce greenhouse gas emissions by 26 to 28 percent below 2005 levels by 2025.

WHEREAS, Oregon has adopted goals to reduce greenhouse gas emissions to 10 percent below 1990 levels by 2020 and 75 percent below 1990 levels by 2050 as described in ORS 468A.20.

WHEREAS, saving energy by using less energy in buildings is one of the least cost ways to achieve emissions reductions in the energy system – often with a net financial savings over the life of these energy efficiency measures, and building codes that are applicable statewide provide uniformity and predictability for building owners and contractors and statewide equity for residents and businesses that help meet greenhouse gas emission reduction goals across the state.

WHEREAS, Oregon is an international leader in energy efficiency, has in-state expertise and a skilled workforce to continue to be a leader, and can build on its reputation through emphasis on state leadership, building codes for newly constructed buildings, and retrofits for existing buildings.

WHEREAS, energy efficiency is a critical and growing portion of the State’s clean energy economy. Investments in energy efficiency sustain a workforce of over 40,000 jobs statewide; 70 percent of these are small businesses with 11 employees or fewer. Investments in energy efficiency also result in financial savings that are spent elsewhere in our economy, resulting in an increase to Oregon’s gross state product of over \$350 million/year.

WHEREAS, low income and other underserved communities often struggle to access energy efficiency programs that will save them money and improve housing quality over the long-term and the State can take steps to implement policies that increase the availability of energy efficiency to these residents.

WHEREAS, state government has a responsibility to lead by example in its adoption of energy efficiency to achieve a more cost-effective and clean energy future.

WHEREAS, energy efficiency actions increase the health, safety, and resiliency of Oregon’s buildings and homes, resulting in lower health care costs borne by the State and its residents.

NOW, THEREFORE, IT IS HEREBY DIRECTED AND ORDERED:

- 1. Definition.** For purposes of this Executive Order, “state agency” shall be defined as any agency within the Executive Department as defined in ORS 174.112, other than the Oregon Secretary of State, Oregon State Treasury, Oregon Department of Justice, and Oregon Bureau of Labor and Industries.

2. Statement of Policy. It is the policy of the State of Oregon to establish an aggressive timeline to achieve net zero energy ready buildings as a standard practice in buildings across the state. Regular improvements to the state energy building code on at least a three-year cycle for residential and commercial buildings for energy efficiency, electric vehicle readiness, and solar installation readiness are essential to meeting this policy, as is a focus on retrofitting older, less-efficient buildings and demonstrating energy efficiency leadership in state-owned and state-leased buildings.

3. Energy Efficiency Leadership in State Buildings

- A. High Performance Energy Targets for Existing State Buildings. State agencies will use high performance energy use targets for remodels in all existing state-owned buildings. Department of Administrative Services (DAS) and Oregon Department of Energy (ODOE) are directed to consider ASHRAE 100 Pathways and work with all state agencies to adopt targets for any remodels that begin after the date of this executive order. State agencies that are not meeting energy use targets will work with ODOE and DAS to undertake energy retrofits to increase the efficiency of their buildings. ODOE is directed to report on and track all state-owned building energy use to guide agencies to implement tactical and achievable energy use reductions. ODOE will work with all agencies to benchmark and identify buildings for retrofits. A database of all eligible state-owned buildings will be created by June 1, 2018.
- B. Carbon-Neutral Operations for New State Buildings. DAS and ODOE are directed to work with state agencies to ensure that new state owned buildings permitted after January 1, 2022 and used primarily for office and other commercial work space are designed to be able to operate as carbon-neutral buildings and follow energy use and renewable energy requirements of ASHRAE standard 189.1. In addition, DAS and ODOE are directed to analyze options with the Department of Environmental Quality that would lower the embodied carbon of building materials in new construction of state buildings.
- C. Statewide Plug-Load Strategy. DAS and ODOE are directed to develop a statewide plug-load management strategy and strategies for other occupant behavior changes to reduce energy uses not regulated by codes and standards. DAS and ODOE will develop a plug load strategy by

January 1, 2019, and DAS will update policies for behavior-based efficiency by January 1, 2020.

- D. Energy Efficient Equipment. DAS, with support from ODOE, is directed to ensure that all equipment purchased by the state meets high-efficiency energy and water use specifications by incorporating efficiency standards into procurement requirements. DAS and ODOE will develop procurement requirements in the 2018-19 fiscal year.
 - E. Lifecycle Cost Analysis. ODOE is directed to analyze state building costs, including lifecycle energy and water use costs or savings, when considering energy and water upgrades for state buildings. By January 1, 2019, ODOE, working with DAS, will develop analysis tools that can inform the high performance energy use targets and carbon neutral requirements for state buildings referenced above.
- 4. Increasing Energy and Water Efficiency in New Construction Across the State**
- A. Solar Ready Building Construction. Department of Business and Consumer Services Building Codes Division (BCD) is directed to revise building codes to require all newly constructed residential and commercial buildings will be ready for the installation of solar panels and related technologies by January 1, 2020. BCD may establish limited specific exemptions to this solar-ready policy for buildings where solar applications are infeasible.
 - B. Electric Vehicle Ready Building Construction. BCD is directed to revise building codes so that all newly constructed residential and commercial buildings are ready for the installation of at least a level 2 EV charger. This process will begin with an implementation plan adopted by BCD by January 1, 2020 or earlier and with full implementation of code revisions complete by January 1, 2025. BCD may establish limited specific exemptions related to types of parking lots, such as temporary parking lots.
 - C. Zero-Energy Ready Homes. BCD is directed to consider the 2017 USDOE Zero Energy Ready Standard and accordingly revise building codes so that all newly constructed residential buildings are zero-energy ready by January 1, 2024.

- D. Increasing Energy Efficiency in Commercial Construction. BCD is directed to revise building codes, by January 1, 2024, for newly constructed commercial buildings which, averaged across building types, will exceed International Energy Conservation Code and the energy efficiency portions of ASHRAE 189.1.
- E. Helping Key, Expanding Industries to Save Costs by Reducing their Energy Footprint. BCD is directed to work with industry stakeholders to identify, by January 1, 2019, key high-energy use industries that are stable or growing and that have the potential to realize significant cost savings and energy savings through building code revisions as it relates to their industrial building types. BCD is directed to establish code revision timelines for each identified industry by January 1, 2020.
- F. Improved State Standards for Appliances. ODOE is directed to work with appliance industry stakeholders to identify categories of appliances for improved efficiency standards, while considering appliance standards of other states, potential efficiency gains, potential costs, and supply chains for the regional market for appliances. ODOE is directed to provide the Governor with a report of its analysis and identify categories of appliances for improved efficiency by January 1, 2019.
- G. High Efficiency Water Fixtures. BCD is directed to revise building codes so that high-efficiency water fixtures are standard in all new buildings. High-efficiency fixtures must be included in the building code for residential buildings by January 1 2020. A timeline for inclusion of high efficiency fixtures in commercial buildings must be in place by January 1 2019.
- H. Increased Water Efficiency in On-Site Reuse. BCD is directed to revise building codes so that water efficiency is improved in all newly constructed buildings through standards for water capture and reuse by January 1, 2020. Building types with more complex water systems should have a plan for standards by January 1 2023.
- I. Continued Excellence in Code Compliance Rates. As building codes become more efficient through implementation of this executive order, BCD will maintain compliance rates of 97% or higher. BCD will continue to ensure Oregon contractors meet and improve their

compliance rates and continue to strive towards state-wide excellence in state-wide construction.

5. Increasing Energy Efficiency through Retrofits of Existing Buildings Across the State

- A. Energy Trust of Oregon Pilot Programs. Oregon Public Utility Commission (PUC) is directed to work with the Energy Trust of Oregon and interested stakeholders to expand meter-based savings pilot programs, including pay-for-performance pilot programs, by January 1, 2019. PUC shall consider, at least, inclusion of pilot programs that focus on existing single family homes, multi-family buildings, and building stock that is significantly less energy efficient than required under current building codes.
- B. Prioritizing Energy Efficiency in Affordable Housing to Reduce Utility Bills. ODOE, PUC, and Oregon Housing and Community Services (OHCS) are directed to work together to assess energy use in all affordable housing stock and develop a ten-year plan for achieving maximum efficiency, as well as a continuum of efficiency levels up to maximum efficiency in affordable housing across the state by January 1, 2019. As part of the assessment, the agencies shall consider new resources and best practices and shall seek assistance from Energy Trust of Oregon and Bonneville Power Administration. OHCS is directed to expand its existing multi-family energy program and green energy path requirements, including a manufactured home replacement program through pilot programs and initiatives, while considering multiple values from energy efficiency improvements, such as health and habitability.
- C. Coordination of Data. ODOE and PUC are directed to support and assist private sector partners in efforts to coordinate sharing of data that shows projected energy use reductions in the region. This data will be made available to the public to inform energy efficiency policies, as appropriate, by January 1, 2020.
- D. Evaluation of Energy and Resiliency Efforts. PUC and ODOE are directed to evaluate the state's distributed energy resources and the efficiency of energy systems needed to improve Oregon's recovery from

a disaster situation. This evaluation shall be completed by January 1, 2019.

- 6. Analysis of Cost.** State agencies are expected to implement this Executive Order using the least cost methods available. ODOE and BCD, working with DAS, PUC, and OHCS, are directed to adopt a cost-analysis tool through a process that involves meaningful public input by December 1, 2018. State agencies shall use this cost analysis tool to determine whether any directive in this Executive Order should be deferred for one year or, if specific to a building code related directive, to the next building code cycle, due to significant cost at the time of implementation of that directive. All state agency processes for determining deferment of a directive in this Executive Order must include at least one public meeting that allows interested stakeholders to provide input.
- 7. Implementation.** The implementation of this Executive Order shall be coordinated through a Built Environment Efficiency Working Group, which will also identify any structural barriers or barriers to information sharing that may slow the progress of any directive in this Executive Order. The Built Environment Efficiency Working Group will review directives in this Executive Order, seek input from interested stakeholders, and recommend opportunities to provide equitable access to clean energy by removing barriers to achieving energy efficiency in the built environment to the Governor and state agencies. The Built Environment Efficiency Working Group shall include the following agencies: DAS, ODOE, BCD, PUC, and OHCS. Agencies shall implement each directive in this Executive Order using their existing internal processes and established rulemaking procedures, including recommendations from any boards. This Executive Order is intended to be consistent with obligations under federal and state law and shall be interpreted as to not violate any requirement of federal or state law.

Done at Salem, Oregon, this ____ day of October, 2017.

Kate Brown
GOVERNOR

ATTEST:

Dennis Richardson
SECRETARY OF STATE

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