



OREGON BUILDING PERFORMANCE STANDARDS ANNUAL REPORT

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**GOVERNOR AND
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by the
**OREGON
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ENERGY**

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EXECUTIVE SUMMARY

Building Performance Standards are a policy framework to address energy use and greenhouse gas emissions from existing buildings. In Oregon, a BPS policy was established through House Bill 3409 in 2023, and the Oregon Department of Energy was given the authority to administer and implement the program. Oregon’s BPS will require many large commercial buildings to enhance energy management practices and implement efficiency measures to meet energy use targets.

ODOE is directed to annually report on implementation of the energy performance standard established in HB 3409. This report provides an update on implementation of the building energy performance standard using ANSI/ASHRAE/IES Standard 100 (ASHRAE Standard 100) as an initial model for the performance standard. ASHRAE is an international organization that performs research and publishes standards commonly referenced and applied to the built environment.ⁱ In 2024, with support from its rulemaking advisory committee, ODOE reviewed and modified ASHRAE Standard 100 and incorporated this standard into administrative rules to define Oregon’s BPS technical requirements.

Oregon’s BPS program will require building owners to dedicate resources for energy management and in some cases to implement energy projects. These efforts will lead to cost-effective energy and operational savings and greenhouse gas reductions. To support building owners with early and voluntary adoption of the performance standard, ODOE was appropriated \$2 million of state funding. ODOE – in partnership with the Oregon Department of Environmental Quality – also successfully applied for an additional \$12 million of federal funding for BPS compliance through the Climate Pollution Reduction Grant. ODOE is currently in the process of designing the framework for these incentives to provide the most value and positive effect across the state with this funding. ODOE expects to make incentives available in 2025.

Oregon is among the first states and jurisdictions in the country to adopt a BPS policy, and ODOE collaborates with other jurisdictions around the country who have implemented similar building performance standards to learn from their challenges and share best practices for implementation. ODOE continues to build on its internal resources and expertise and looks forward to additional collaboration with its advisory committees and other partners for successful BPS program implementation.

This report is available on ODOE’s website: <https://www.oregon.gov/energy/Data-and-Reports/Pages/Reports-to-the-Legislature.aspx>

ⁱ <https://ashrae.org/about>

TABLE OF CONTENTS

EXECUTIVE SUMMARYi

OREGON BUILDING PERFORMANCE STANDARDS – OVERVIEW AND HISTORY 1

ADOPTION OF ASHRAE STANDARD 100..... 2

FINANCIAL IMPACT ON BUILDING OWNERS..... 3

PROGRAM INCENTIVES..... 4

ODOE SUPPORTING ACTIVITIES AND NEXT STEPS 4

OREGON BUILDING PERFORMANCE STANDARDS – OVERVIEW AND HISTORY

Building Performance Standards are a policy framework to address energy use and greenhouse gas emissions from existing buildings. BPS programs are emerging in many jurisdictions across the country to support achievement of local energy and climate goals. Such policies generally call for building owners to integrate energy management practices into their operations and require buildings to meet outcome-based performance targets. BPS programs are distinct from, but complementary to, energy codes for new buildings. While energy codes focus on equipment and efficiency measure criteria that must be incorporated into design and construction, Building Performance Standards extend the focus to energy efficient performance throughout the building's operational lifecycle. Establishing performance metrics with specific targets, performing energy surveys, developing energy and operational management plans, and periodically re-evaluating energy performance are common elements associated with building performance standards. BPS programs often focus on whole-building performance without prescribing specific energy measures to be installed. This affords building owners the flexibility to evaluate and choose the cost-effective measures that will help them achieve energy targets. BPS programs typically prioritize compliance of larger commercial buildings and then phase in requirements for smaller buildings over time.

In Oregon, Building Performance Standards became a key policy focus and recommendation of the Joint Task Force on Resilient Efficient Buildingsⁱⁱ established by Senate Bill 1518 (2022).ⁱⁱⁱ Throughout 2022, this task force worked to identify and evaluate building energy and decarbonization policies that would enable the state to meet its greenhouse gas reduction goals while improving energy efficiency, grid resilience, public health, and air quality. Through the Task Force work, BPS emerged as a policy option and was supported by the majority of task force members, as documented in the Joint Task Force on Resilient Efficient Buildings Final Report.^{iv}

Following up on the Task Force's work, the Oregon Legislature passed House Bill 3409^v in 2023. Sections 8-17 of this bill established an Energy Performance Standard for commercial buildings modeled after ASHRAE Standard 100, also referred to as a Building Performance Standard (BPS). The performance standard targets energy use and emissions from existing commercial buildings, which account for nearly 20 percent of energy use in Oregon. It requires large commercial buildings to report their energy use and meet energy targets. This will require many buildings to enhance their energy management practices, perform energy audits and life cycle cost assessments, and implement energy efficiency measures.

Energy targets are based on an average energy use intensity (EUI) for each type of building, modeled after the targets developed for ANSI/ASHRAE/IES Standard 100-2024, Energy and Emissions Building Performance Standard for Existing Buildings. The EUI metric uses total net annual energy consumption at a building site and divides it by gross square footage to arrive at a value that can be used to evaluate building energy performance.

Under the Oregon BPS program, large commercial buildings are divided into tiers based on building type:

ⁱⁱ <https://olis.oregonlegislature.gov/liz/2021I1/Committees/JTFREB/Overview>

ⁱⁱⁱ <https://olis.oregonlegislature.gov/liz/2022R1/Measures/Overview/SB1518>

^{iv} <https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/258395>

^v <https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/HB3409>

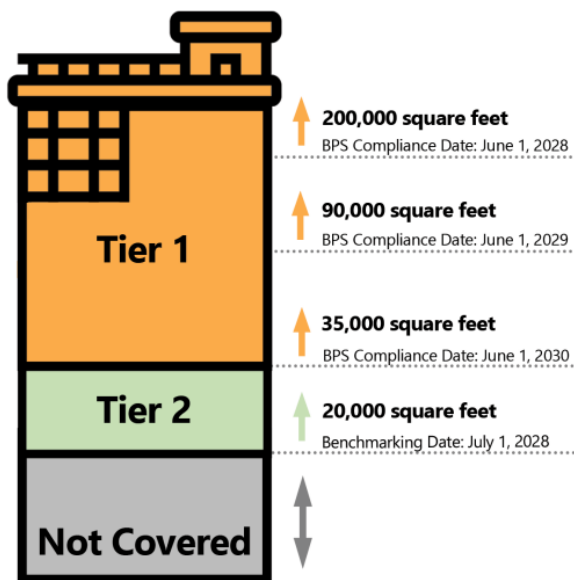
Tier 1: A building in which the sum of gross floor area for hotel, motel, and nonresidential use equals or exceeds 35,000 square feet, excluding any parking garage.

Tier 2: A building with gross floor area, excluding any parking garage, that equals or exceeds 35,000 square feet and that is used as a multifamily residential building, a hospital, a school, a dormitory or university building; or a building in which the sum of gross floor area for hotel, motel, and nonresidential use exceeds 20,000 square feet but does not exceed 35,000 square feet, excluding any parking garage.

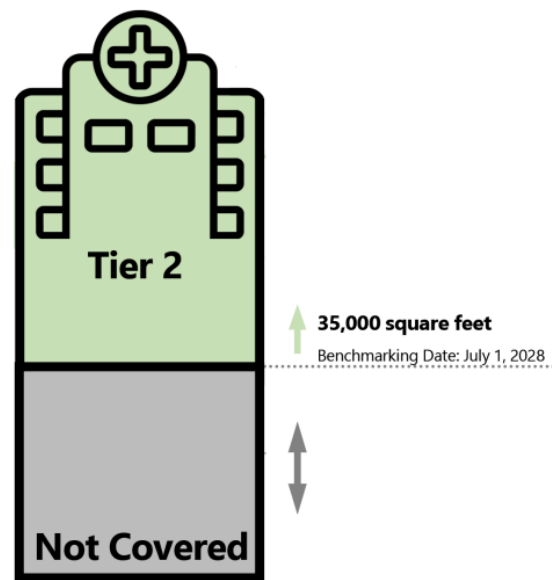
The BPS program requires buildings to benchmark their energy use and assess whether they meet energy targets. Buildings that do not meet targets enact additional procedures to achieve compliance, including energy audits, life cycle cost assessments, and implementation of efficiency measures. The benchmarking and compliance schedule, based on building tier and building size, is shown in the chart below.

Buildings Covered by Oregon’s Building Performance Standard Program

NON-RESIDENTIAL, HOTELS, AND MOTELS



MULTIFAMILY RESIDENTIAL, HOSPITALS, SCHOOLS, DORMITORIES, AND UNIVERSITIES BUILDINGS



ADOPTION OF ASHRAE STANDARD 100

As directed by HB 3409, ODOE adopted BPS program rules based on ASHRAE Standard 100 as the energy performance standard for covered commercial buildings. ODOE established a licensing agreement with ASHRAE to enable agency use and modification of the ASHRAE standard to support the BPS program. Over the course of 2023 and 2024, ODOE held a series of Rulemaking Advisory Committee (RAC) meetings and public meetings to discuss building performance standards and to review and modify

ASHRAE Standard 100 for application to Oregon’s BPS. Meeting dates are listed below, and meeting materials and recordings may be found on ODOE’s BPS and Rulemaking websites.^{vi vii}

Public Meetings

- December 13, 2023
- March 21, 2024
- June 5, 2024
- September 11, 2024
- October 15, 2024

Rulemaking Advisory Committee Meetings (Open to Public Attendance)

- February 21, 2024
- April 4, 2024
- May 22, 2024
- June 26, 2024
- July 17, 2024
- August 21, 2024
- September 4, 2024
- October 15, 2024

The outcome of this rulemaking process is an Oregon-specific version of ASHRAE Standard 100 that codifies the program’s rules and requirements through administrative rules that were filed at the end of 2024.^{viii} Oregon modifications to ASHRAE Standard 100 include specific energy use intensity targets to align with the requirements of Oregon’s BPS program and HB 3409, utility data aggregation requirements, covered building reporting requirements, and edits to focus on energy use at the building site. The Oregon-specific version of the standard will be posted when available on the ODOE BPS website.^{ix} ODOE looks forward to continuing to work with its advisory groups for program implementation.

FINANCIAL IMPACT ON BUILDING OWNERS

Building Energy Performance Standards are expected to have a financial impact on the owners of covered buildings. Energy management and project installation will require resources but will also result in energy and cost savings for building owners and tenants. Often the value of the energy savings over time exceeds the up-front cost to install the energy efficiency measures, but each case is unique. The program is just beginning and compliance for the largest buildings doesn’t begin until 2028, so the financial impact on building owners to-date has been minimal. The exact financial impact for a specific building will depend upon that building’s unique characteristics and whether the building meets the energy use intensity target for its occupancy type. All covered Tier 1 buildings will require resources for energy reporting, development of energy management plans, and operational plans. For a building that

^{vi} <https://www.oregon.gov/energy/save-energy/Pages/BPS.aspx>

^{vii} <https://www.oregon.gov/energy/Get-Involved/Pages/BPS-Rulemaking.aspx>

^{viii} <https://www.oregon.gov/energy/Get-Involved/Documents/2024-12-31-Permanent-Administrative-Order-BPS-rulemaking.pdf>

^{ix} <https://www.oregon.gov/energy/save-energy/Pages/BPS.aspx>

does not meet the energy use intensity target for its occupancy type, the financial impact will depend upon the energy management and investment plans adopted by the building owner, and the activities contained within, to make progress toward meeting the target and compliance requirements. Energy audits may be required if a building does not meet its energy target or uses the Investment Criteria pathway (explained below).

The costs for energy audits and analysis, actions to implement operational changes under an energy management plan, and investments in energy efficiency improvements will depend upon individual factors related to the building's size, use, system complexity, design, construction, and materials. The standard includes an Investment Criteria pathway, which provides cost-effectiveness and cost-containment protections for building owners by limiting required actions to a cost-effective bundle of energy efficiency measures. Through program implementation, ODOE will work with building owners and industry to understand the financial impacts of the standard to support effective energy savings, cost savings, and greenhouse gas reduction.

PROGRAM INCENTIVES

HB 3409 includes provisions providing authority for ODOE to offer incentives for eligible building owners to voluntarily comply with, or for early compliance with, the building performance standard. The BPS incentive program has a current budget of approximately \$14 million that will be available for this offering. This funding comes from two sources: \$2 million from the Oregon State General Fund and \$12 million of federal funding through the Climate Pollution Reduction Grant (CPRG) that Oregon successfully applied for and received to increase support for building owners achieving early and voluntary compliance. The Oregon Department of Environmental Quality is the primary recipient of the federal CPRG funds and ODOE is a subrecipient. The incentive component of the program is still under development, and no incentives have yet been offered or awarded to owners of buildings covered under the BPS standard.

The current focus of the BPS incentive program is on developing these incentives to offer the most efficient and effective benefit for building owners. Along with researching best practices and lessons learned and meeting directly with other jurisdictions with similar BPS incentives, ODOE has sought feedback on potential incentive structure and will continue to perform outreach to define incentive offerings and eligibility. ODOE facilitated an incentive workshop on November 21, 2024, to hear early input from its advisory committees on key considerations ODOE should include in the program. ODOE plans to conduct rulemaking to define incentive administrative requirements and launch incentives in 2025.

ODOE SUPPORTING ACTIVITIES AND NEXT STEPS

After completion of initial BPS program establishment and administrative rulemaking, ODOE will expand focus on additional activities to support implementation of the BPS program. These include onboarding new program staff, continued analysis of Oregon's building stock and development of a covered building list, notification to covered building owners, engagement with partners to support program

implementation, and development of educational materials to support building owners. More information about each of these activities is below.

The recently formed Codes and Standards (C&S) section at ODOE is responsible for developing and implementing the BPS program. In 2024, this group grew from a program manager to a team of four members by hiring a facilities engineer, a program design policy analyst, and a public service representative. In 2025, the C&S team will fill two more program analyst positions and designate an IT professional to support program compliance portal tracking and reporting systems.

ODOE is working with the Department of Administrative Services (DAS) Enterprise Information Services staff to ensure the program's needs are defined and met for procurement of a compliance portal system software solution that building owners will use to submit compliance information.

ODOE has also compiled a preliminary list of covered commercial buildings and building owners that are subject to compliance. ODOE staff has worked closely with county assessors from each of the 36 Oregon counties to obtain building and owner information, supplementing that data with information from various state databases and DAS real estate subscription services. ODOE is grateful for the support from county assessors during this process. ODOE staff have geocoded building addresses and created a Geographical Information System (GIS) map to visualize commercial buildings across Oregon; ODOE will provide notifications to covered building owners in 2025.

The BPS team has worked with national laboratories such as Pacific Northwest National Laboratories and the U.S. Department of Energy to investigate existing tools that can support this program. These include Unique Building Identification, Standard Energy Efficiency Data Platform, Energy Star Portfolio Manager, and Audit Template. C&S is working to customize these tools for use in Oregon's BPS program.

To support BPS implementation ODOE will also develop guidelines, educational materials, "how-to" resources, and other outreach materials to help covered building owners, representatives, and industry navigate program requirements and prepare for compliance. ODOE looks forward to continuing robust engagement with program partners to successfully implement this new BPS policy that will reduce energy consumption, save operational expenses for owners and tenants, and reduce greenhouse gas emissions from Oregon's commercial buildings.

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