BetterBricks Industry Voices: Blake Shelide

Blake Shelide, Manager of the Codes and Standards section at the Oregon Department of Energy, discusses the future of Oregon's building codes, Building Performance Standards requirements, and ways for building professionals to stay informed and get involved.

Tell us about the Oregon Department of Energy's (ODOE) Codes and Standards section.

The Codes and Standards section at ODOE supports Oregon's building codes through training, education, and technical assistance. We serve on boards and committees to move codes forward in Oregon and help develop some of the more technical requirements of building codes. We work closely with Oregon's Building Codes Division, which administers, adopts, and enforces building codes in Oregon.

As an agency, we also set efficiency standards for some appliances and products that need to be met in order for those products to be bought and sold in Oregon.

Most recently, we set up a new program known as Building Performance Standards (BPS) that sets statewide energy management and performance requirements for many large commercial buildings.

What are some of the factors involved in ODOE's building code adoption process?

Oregon prides itself on being a leading state with its energy code. We use available data to look at how much a new developing technology might cost and how much energy it might save. We try to walk the balance of bringing in the most efficient technology, but when it's market ready.

We also take consumer choice into consideration. We aren't necessarily pushing a builder or contractor into one specific technology – we're giving them the flexibility to achieve a certain energy performance by having a few different pathways to get there.

How have Oregon's building codes evolved over time?

With each successive code cycle, the requirements and the opportunities have become less about the performance of the equipment going into the building and more about how the buildings are operated.

A few decades ago, when codes really started to make a big jump forward, it was largely about incorporating the low-hanging fruit. Easier measures like more insulation, better windows, more efficient heating and

cooling equipment, and improved lighting were included in the code.

Nowadays we're seeing more controls requirements built into the code that will automate things, such as occupancy sensors that turn off equipment when it's not being used. It's becoming more about making sure we're not using our equipment when it's not needed and adjusting lighting throughout the day to conserve energy, like when there's sufficient daylighting.

It's also making sure those building control systems are configured to perform from the start and built into the building operations prior to being occupied. Often, if a control system isn't programmed to operate a certain way before it's built, it might never be changed.

Oregon's Executive Order 20-04 established requirements for increasing code efficiency, so we're moving toward a 60% reduction in energy use or 60% improvement in efficiency by 2030, compared to a 2006 baseline.

How did Oregon's BPS program come about?

While building energy codes regulate the efficiency of new construction and renovations, BPS regulates the efficiency of existing buildings.

Our building codes have done a great job regulating and requiring buildings to be more efficient when they're built, but there's been a policy gap when it comes to making sure they're hitting efficiency targets once in operation.

The Oregon legislature passed House Bill 3409 in 2023, which established the BPS policy. The legislature gave it to ODOE to implement, and we developed the administrative rules and technical requirements for it. I'll note that BPS is an emerging policy – nationally, Oregon was the fourth state to adopt it.

What are the requirements of Oregon's BPS?

Oregon's BPS program is modeled closely after the Washington State program. Our legislation language is similar, and we're also basing our BPS on ASHRAE Standard 100.

Commercial buildings in Oregon will be categorized into two tiers based on their size and business type. Starting in 2028, both tiers are required to measure and report their energy use to ODOE, and the first tier of buildings will need to meet a specific energy target set by the program to comply with BPS standards.

In many cases, those efficiency targets can be met by retro-commissioning the building and making sure it's operating the way it was originally intended to. The performance of that building might have drifted over time due to changing set points or equipment failing.

This pairs nicely with other Oregon codes requiring a little bit of active engagement on the part of building managers. For example, in some cases codes require that building owners and occupants are informed through submetering and energy monitoring so they can more easily tell if their energy use starts to increase when they don't expect it to – helping them correct it before it becomes an issue.

How do various building types and sector-specific challenges factor into ODOE's codes and standards?

Oregon's BPS program puts buildings into different tiers so we can take a more thoughtful and timely approach to certain building types. For example, multifamily buildings have major affordability considerations – you want to make sure you're not imposing a standard that's going to negatively affect the energy burden or the rent burden of tenants.

Another example is schools, which have unique project funding and implementation situations. As a result, schools are classified as Tier 2 buildings that only need to report energy-use information for the first compliance cycle and will not need to meet performance standards.

You mentioned BPS will require commercial buildings to report their energy use to ODOE. How will you use this data?

One thing we're really excited about is that BPS will provide us with a robust picture of Oregon's existing building energy usage, which is something we've never had before.

One of the tasks we have at ODOE in the first half of 2025 is compiling a list of covered buildings, which hasn't really existed in any form in the state. There hasn't been a central place where you can look at all large commercial buildings in the state, and that alone will be really helpful.

Five or six years from now, we'll have a really interesting data set for real building energy use in Oregon. And if you take this forward multiple compliance cycles in the future, we'll have a dynamic view of how buildings are improving over time, too.

This data will also have numerous uses to help inform programs and policies and different actors in the state. For example, what are the available opportunities? If all these buildings were to change their heating systems, how would that affect and improve our statewide energy performance? What would we need to do to the grid to support that?

How can the industry support building owners to achieve or maintain BPS compliance?

Building owners will likely need some coaching around how to benchmark and how to understand their energy use – especially if it hasn't been built into their operational procedures so far. We'll do some of that within ODOE, and we'll look to other industry players to help fill
the gaps.

Utilities want to see building owners become more efficient. The engineering community and design community have a potential business case to make to help building owners. And the construction community, including some of the integrated service providers, can also come in and help building owners save money and cost-effectively implement projects. It's going to require everyone to work together.

We hope it's a win-win all around, where folks can engage, support their businesses, and help building owners save money.

What resources are available for members of the building community looking to stay informed or get involved with the code adoption process?

We want the Oregon codes and standards conversation to be an open one. That's exactly why all the processes we use at ODOE to develop BPS and set the stage for the next codes are public. I'd encourage anyone who wants to become more informed to join those meetings, make comments, and ask questions.

For example, we offer the Oregon Energy Code Stakeholder Panel meetings to bring the broader community into the code development process. And we have also given "Energy Code 101"-type trainings where we describe how Oregon codes get developed and how citizens can play a role.

When the code goes through an update cycle, we deliver a series of trainings to educate the industry about what has changed and what the new requirements are. We'll typically give a training intended for the architects, engineers, and construction community (specifically contractors and trades). We also provide trainings to the building officials who will review the plans to determine whether a building complies.

I'd encourage builders and designers to look to the ODOE Building Codes Division and BetterBricks for more information.

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> *—Blake Shelide, Manager of Codes and Standards, Oregon Department of Energy*

Additional Codes Support and Quick Links

Oregon Building Energy Performance Standards
https://www.oregon.gov/energy/save-energy/Pages/BPS.aspx

Oregon Energy Code Stakeholder Panel
https://www.oregon.gov/energy/Get-Involved/Pages/Energy-Code-Stakeholder-Panel.aspx

ODOE Building Codes Compliance, Training, and Resources
https://www.oregon.gov/bcd/codes-stand/Pages/energy-commercial-compliance.aspx

Oregon Commercial Code Assistance:
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