

Oregon State Bar Sustainable Future Section

Photo: J. Michael Mattingly

The Long View

Moving Green Building Forward: Carrots or Sticks?

By Marian Thomas and Chris Forney

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CALGreen is the nation's first green building standards code. For the first time, *all* new buildings in the state of California are required to incorporate sustainable design and construction practices to gain planning department approval and pass building department inspections. Oregon has also played a leadership role in green building, choosing to focus its policies on incentives instead of requirements.

These “carrot” and “stick” approaches provide very different benefits and challenges for legislative bodies and the develop-



ment and construction industries. Which will move green building forward faster? And does it make sense for other states to follow California's lead? The answers depend on how a few crucial aspects of CALGreen play out and on whether Oregon can keep supplying the financial incentives that the green building industry has come to rely upon.

America's First Green Building Code

On January 1, 2011, California's new statewide green building code went into effect. The intent of CALGreen is to create a *baseline* of green building requirements across the state. In 2006, California passed Assembly Bill 32, requiring a statewide reduction in greenhouse gas emissions to 1990 levels by 2020. The California Air Resources Board allocated more than 26 million metric tons of carbon dioxide reduction to energy efficiency upgrades and green building strategies.

While many cities in California already had existing green building ordinances in place, the requirements were not widespread, nor did they apply to every building type. Under CALGreen, even smaller jurisdictions without established green building ordinances are required to, at a minimum, reduce water consumption by 20 percent, meter outdoor water use, recycle construction and demolition waste, install low-emitting materials, and commission buildings larger than 10,000 square feet.

The new code also ensures that project scopes and occupancy types not governed under existing ordinances are now covered under the code. For example, all new hospital projects under the jurisdiction of the Office of Statewide Health & Planning must now comply with a list of green building standards. Prior to 2011, there were no green building requirements for health-care projects in the state.

While CALGreen currently applies only to new ground-up construction, the next generation of the code is expected to incorporate requirements for existing building renovations. This will further ensure green building practices are integrated into all projects, regardless of scope or size.

Unlike the LEED rating system, which is often complicated by limited scopes, a green building code can be broken down into specific measures. At the end of the day, the majority of CALGreen's requirements are neither overly stringent nor onerous, particularly given the state's existing energy code, and are a solid first step toward advancing green building through mandatory measures.

An Oregonian Approach—Offer Carrots

Oregon's legislative record on green building demonstrates a willingness to invest in sustainable infrastructure to spur economic development and promote environmental leadership, which is important to many Oregonians. The legislature's investment strategy has relied on incentives rather than requirements.

For example, the Oregon Built Environment & Sustainable Technologies Center (“Oregon BEST”) convenes Oregon's academic research and development institutions and facilities with key innovation clusters of renewable energy and sustainable built environment products and services. The goal is to

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nurture public/private partnerships to transform marketable ideas and research into business opportunities and jobs. The legislature established Oregon BEST in 2007. Since its creation, the organization reports more than \$38 million in research revenue generated for Oregon from federal, industry, and foundation sources.

The state's Business Energy Tax Credit ("BETC") has also been an extremely popular incentive. Oregon has been exemplary in setting statewide sustainability goals (as articulated in the Oregon Revised Statute section 184.423) and giving the private sector, including private developers, the tools to build greener buildings that align with those goals. However, the 2011 Oregon Legislature faces a \$3.5 billion budget deficit and BETC has come under intense scrutiny. Cost overruns have created a backlash against Oregon's most successful green building and renewable energy incentive programs, which are now expected to fade into the sunset in 2012.

Oregon's Department of Administrative Services ("DAS") enacted a policy in November 2004 that requires, like many states, the construction and renovation of state-owned facilities to meet the LEED rating system's Silver level. The DAS mandate and similar requirements by the City of Portland and City of Eugene for green building performance criteria and certification are having an impact on municipally owned and operated buildings, but private developers are not required to comply.

For many private developers, BETC has taken the edge off higher upfront costs needed to achieve long-term energy savings that ease pressure on the failing utility grid and to create healthier buildings for occupants. LEED requirements for state facilities, on the other hand, have emphasized operational cost savings and benefits over initial costs and have arguably contributed greater long-term value to taxpayers. As a result, Oregon ranks fifth in the nation for LEED-certified green buildings, surpassing other states with far more buildings and more diverse economies.

Challenges Ahead: Heavy Sticks and Withered Carrots

As the stick and carrot methods play out in the post-recession economies, different types of challenges emerge. Building green has nearly become the status quo in many metropolitan areas, so developers may not want to move backwards and create less green, less competitive buildings now that the market as a whole has moved forward. But they may also not be economically bullish enough yet to pursue the more aggressive goals for steadily increasing performance, such as 2030 Challenge goals for mov-

ing toward carbon-neutral buildings.

Oregon's budget deficit is forcing the BETC program to wind down and it's unclear whether green building in the state will maintain its momentum after the state tax incentive money dries up. A fortunate legacy of the BETC program is that there is now a concentration of green building practitioners experienced in LEED who are better trained to meet the challenge of developing more sustainable buildings on shrinking budgets.

The challenges of CALGreen's stick method are in the minutiae of compliance measures new to both cities and developers. For instance, many have assumed documentation for all measures, mandatory and voluntary, would be included in the construction drawings or specifications submitted to and reviewed by the building department as part of the plan check. However, each building department can mandate its own documentation and compliance review process as well—from requiring third-party reviews, to bringing on a licensed "Green Building Compliance Professional of Record" or "Green Building Certifier" (at the owner's expense) to sign off on the green measures in the project.

Given the budget crisis impacting many municipalities over the last few years, numerous positions in planning and building departments have been eliminated. Cities now have less capacity and expertise to review green building-specific documentation. In addition, municipal requirements for third-party project reviews are creating concern about liability. As a result, few licensed professionals are willing to sign off on the "CALGreen features" in a project as required by cities such as San Francisco.

At the same time, CALGreen includes requirements that may extend beyond the occupancy permit. For instance, building commissioning, which is mandated for projects over 10,000 square feet, requires a commissioning agent to perform an on-site review to verify that all energy-related systems are calibrated properly and operating as designed. This process often occurs after occupancy, when the building systems are running in normal operating conditions. Enhanced commissioning requires the commissioning agent revisit the site within 10 months following occupancy to review the systems again.

This raises a number of questions: How do we demonstrate compliance with a requirement that extends past the occupancy permit? What happens if the commissioning duties are never fulfilled? Will cities incorporate fines or penalties? Who is responsible at that point? As projects proceed forward through building department approvals, it is clear that many of these compliance issues will need to be addressed.

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Looking Forward – What to Watch For

Given the different advantages and challenges of mandatory codes and incentives, what should people look for to decide which method produces better results? In Oregon, the extent to which development in Oregon will maintain its current green adoption rate without the BETC program incentives will be a strong indicator of whether incentives can leave more than a temporary legacy. For CALGreen's code method, lingering questions remain about who will oversee compliance of new green building codes as state government deficits grow and building department staffs shrink.

One thing remains clear: every state and private company faces long-term negative economic impacts as a result of climate change, over-consumption of limited resources, and diminishing critical ecological services for clean air and water. It also remains clear that those private companies and public agencies that can successfully navigate the relatively short-term budget challenges—while remaining true to the values of sustainability—will emerge as the long-term winners and leaders as the economy recovers.



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