

## Pacific Northwest Leads in Green Building

*Cascadia region goes beyond platinum.*

As anyone who has flown into Vancouver, Seattle or Portland knows, the coastal Pacific Northwest is very green. From the Cascade Range that runs from Northern California to Southern British Columbia to the big river systems that flow from the distant Rockies, the region is rich in forests, wilderness, salmon and other wildlife—and populated by folks who care deeply about the environment. This environmental consciousness has helped make the Pacific Northwest—also known as Cascadia—the hands-down regional leader for green building in the United States.

While Chicago can boast of being the top green building city east of the Rockies, Cascadia's much smaller cities are far ahead of the Windy City in terms of green buildings when measured as a proportion of all building space or by population. In fact, according to U.S. Green Building Council (LEED) online data of certified projects, Portland, with 53 certified green buildings including five Platinum-rated structures, is the leading green building city in the United States in absolute numbers. Ranked by population, Portland is even further ahead. With 550,000 people, the city has nearly one green building for every 10,000 people.

Seattle is not far behind with 45 certified green buildings, or about one for every 13,000 of its 590,000 people. "Per capita, Seattle and Portland have long vied for having the number one and number two spots in terms of most green buildings in the country," said Jason F. McLennan, CEO of the **Cascadia Region Green Building Council (CRGBC)**. "In Canada, British Columbia is the leading province for green buildings." With 15 staff spread across offices in Oregon, Washington, British Columbia and Alaska, the CRGBC is also the largest USGBC

and Canada GBC chapter in the United States and Canada "by a significant margin," according to McLennan.

The green building consciousness is deeply rooted in the region's citizenry and its focus on resource conservation and sustainability, according to McLennan and others. A landmark event was a 1997 Sustainable Building Northwest Conference, followed by subsequent gatherings and the adoption in 1999 of the Northwest Region Sustainable Building Action Plan that called for a regional green building strategy in which talent and experience could be shared across city and state lines. The CRGBC was formed soon after as an umbrella organization to lead and harmonize green building efforts.

"The whole reason for our existence is that this region tends to have more in common than not, despite the fact that we cross two countries," said McLennan. "This entire region benefits from having some of the most pristine wilderness areas left in the United States and Canada, with salmon, tourism, timber and resource extraction industries."

"A lot of the same firms practice in the different cities, and there's a regional economy that exists in green building, not that those firms don't go outside these borders," said McLennan. "But you definitely have California firms and then you have Northwest firms. Sometimes they do business in each others' backyards, but there really is less overlap."

As in other parts of the country, local

and state governments led the way by enacting policies to make public buildings greener and more energy efficient. "Seattle was the first city in the country to mandate LEED for all public buildings," said McLennan. "Portland was second, and Vancouver was the first Canadian city to do so." Government policies have also evolved to provide more incentives for private projects. "Seattle, Portland and Vancouver have for a long time been leaders in promoting green building. They have green building staff that advocate for and educate builders about green building."

Carolyn Forsyth, sustainable design advocate for Seattle- and Portland-based firm **Ankrom Moisan Associate Architects**, credited the Oregon Business Energy Tax Credit for providing a substantial incentive for businesses to upgrade their energy efficiency. According to the state website, energy conservation retrofits can qualify for credits of 35% of project cost, while renewable and high-efficiency energy projects can get 50%. Retrofit projects must demonstrate a 10% energy savings, and 25% in the case of lighting. Tax credit awards granted so far have a wide range, including a \$193,000 credit for a winery that installed PV panels and \$1,145 for a landlord that installed high-efficiency windows on a single rental home. More recently, government policies in Cascadia are moving toward requiring green and energy-efficient design strategies and features for private buildings above certain sizes. And those policies are evolving rapidly. "The City of Portland

### 2007 Living Building Challenge Winners

Oregon Health Sciences University Center for Health and Healing	Portland, OR
Omega Center for Sustainable Living	Rhinebeck, NY
Seminar II	Olympia, WA
Warren Skaaren Environmental Learning Ctr at Westcave Preserve	Round Mountain, TX
Alice Ferguson Foundation	Accokeek, MD
Kenton Living Building	Portland, OR

Source: U.S. Green Building Council

has an Office of Sustainable Development that provides a lot of guidance,” said Renee Loveland, sustainability director for developer **Gerding Edlen**. “They’re now trying to fine-tune a proposal to reduce carbon emissions within the City of Portland, and they’re considering establishing a threshold that all buildings will need to meet, probably LEED Silver or Gold, or an Energy Star rating.” According to Loveland, the city is weighing a formula that will charge a fee based on anticipated carbon emissions to owners of buildings that don’t meet the standards, while those exceeding the standards will receive incentives. Even existing buildings above a certain size may have to be rated for energy efficiency and carbon emissions and disclose the rating to potential tenants and purchasers. “The idea is to drive the market to be proactive,” said Loveland.

In July, the Vancouver City Council unanimously approved a Green Homes Program with new requirements for one- and two-family dwellings such as upgraded insulation and windows, in-home energy use monitors, heat recovery ventilators, charging stations for electric vehicles and other features. The city’s Climate Change and Sustainability office estimates that the changes should result in annual savings of 6,000 metric tons of greenhouse gases annually by 2013

McLennan attributed the regulatory trend in Cascadia to “rising awareness of climate change, especially since 2006.” Additionally, the demand side of the green building equation is getting larger as cost premiums for green upgrades and materials come down and perceptions about the economic value of green buildings become stronger. “There is increasing recognition that green buildings are better investments offering better value and better economic return,” he said.

In keeping with its leadership role, the Cascadia Region Green Building Council introduced in 2006 a new standard for green building that is said to go beyond

## Cascadia’s Platinum Buildings

### Oregon (all in Portland)

Oregon Health Sciences University Medical Office Building

Portland Center Stage, Armory Renovation  
Burnside Rocket

The Casey Condominiums

Mint Dental Works (renovation)

### Washington

Perkins + Will (Seattle)

King County Recycling & Transfer Station (Shoreline)

Washington Public Utility Dist (Olympia)

Source: U.S. Green Building Council

LEED Platinum. The Living Building Challenge requires that buildings meet all their energy needs with onsite clean energy and capture and treat all of their wastewater. The concept was unveiled at the 2006 Greenbuild trade show to a very positive reaction. “I was delighted,” wrote Christine Ervin of *GreenBiz.com*. “Here was a construct for thinking ‘beyond Platinum’—a concept I was cool toward years ago when we were still building the LEED brand. But with so much experience in the market now, and the USGBC embarking on a next-generation LEED, surely the Living Building Challenge could inspire and stimulate.”

And indeed it has with developers, architects and project teams all over the United States competing for the honors. At the 2007 Greenbuild show, six designs were selected for showing promise during the design phase, four from Cascadia, one from Texas and one from Maryland. “Our living building challenge is getting the region a lot of attention as it becomes a national program,” said McLennan. But with nationwide competition, green builders in Cascadia are still aiming to dominate at Greenbuild 2008. “There are 12 projects pursuing it in Portland alone,” said McLennan. ⚙

## LEED Or No LEED, a Leading Contractor Says Clients Want Energy Efficiency and Green Attributes

**W**ith a commitment to green construction practices that goes back to 1995, when it joined the World Business Council for Sustainable Development, the Sweden-based global construction management firm **Skanska** claims a solid position among the top green-building contractors in the market today. The firm’s U.S. subsidiary **Skanska USA Building Inc.** (Parlissippany, N.J.) was the number-one green contractor on *Engineering News-Records* (ENR) list of top green contractors in 2007 and held its own to place third on ENR’s 2008 list, generating more than \$1.2 billion in revenues (29% of construction revenues) devoted to green design and construction during 2007. (Rankings are based on annual revenues from third-party certified green projects.)

Skanska has nearly 200 LEED accredited professionals (APs) on staff. Among Skanska’s signature LEED projects: Providence Newberg Medical Center, the first LEED Gold hospital in the United States; and the country’s first LEED Gold airport terminal, Delta Terminal A at Boston’s Logan Airport.

“Skanska prides itself on being a city builder with great attention to the quality of community life in the places where we live and work,” said Myrrh Caplan, Skanska’s national program manager for green construction. “Cities will need schools, municipal buildings, infrastructure, housing, and hospitals as well as sports and entertainment centers in the years to come.... There could be a lot of room for green construction.”

The focus on city building is reflected in Skanska’s 2007 revenues in green contracting: 26% in retail and office space; 22% in civic and entertainment facilities,