

PortlandTribune

The Greenest of the Green?

State, city leaders push to build the world's most sustainable building

BY JIM REDDEN

The Portland Tribune, Mar 5, 2009, Updated Oct 30, 2009

State and city leaders are planning to construct the greenest building in the world near Portland State University — even though it may cost far more than the most environmentally friendly building ever built anywhere so far, at least in the short run.

The Sustainability Center of Excellence is envisioned as a symbol of the region's leadership on environmental issues. The possible 12-story, 240,000-square-foot building is being pushed by Gov. Ted Kulongoski and Portland Mayor Sam Adams as a permanent home for a wide range of public agencies, private businesses and nonprofit organizations dedicated to sustainable development.

"The Portland area is the leader on green issues, and this building will help us keep that edge," said Adams, who is working with the Oregon University System and Portland Development Commission on the project.

On Wednesday, the PDC chose a design team comprised of Gerding Edlen Development, SERA Architects and GBD Architects. The PDC will negotiate a contract for the study with the team. A decision on whether to proceed with the project will be made in June.

Kulongoski is asking the 2009 Oregon Legislature for \$80 million in higher education bonding authority to construct the building. No one knows whether that will be enough for the building, however, or where any additional money will come from if the estimated costs are higher.

The problem is, no one has ever built such a building before. Plans call for it to be a so-called "living building," a radical concept that — among other things — calls for the building to generate all of its own electricity, collect all of its water from rain and existing aquifers and recycle all of its waste water and sewage.

Some studies already suggest such a building could cost 12 percent to 52 percent more than the most environmentally advanced building being built today — those certified as LEED Platinum by the U.S. Green Building Council, the national nonprofit organization that developed the Leadership in Energy & Design Green Building Rating System used to rate sustainable buildings.

Adams said the project is worth pursuing, even if the initial costs are higher than conventional or even current sustainable buildings. According to Adams, the higher costs should be offset by energy and other savings over the life of the building.

"When Oregon and the region first adopted its land-use planning system, there were people who said that wouldn't be affordable, either," said Adams. "But they were proven wrong, and now the land-use system is one of our big draws."

A consortium of 16 local environment-oriented organizations also supports the project. Most if not all of the members of the Living Building Initiative hope to move into the building once it is finished.

"We are committing to 10-year leases and some purchases, like condominiums," said Andrea Durbin,



JONATHAN HOUSE / TRIBUNE PHOTO

A parking lot on Montgomery Street, between 4th and 5th avenues, would make way for a future 12-story "Living Building" structure that city and state leaders hope could be a symbol of Portland's sustainability leadership.

executive director of the Oregon Environmental Council, one of the member organizations.

Durbin also believes the potentially high construction costs are worth it.

“You have to take a long-range view of the project,” she said.

Other members include 1000 Friends of Oregon, the Coalition for a Livable Future, the; Energy Trust of Oregon, Friends of the Columbia Gorge, Green Building Services; and the Oregon Environmental Council.

Another expected tenant is the Portland + Oregon Sustainability Institute, a new initiative led by Adams and Commissioner Dan Saltzman to promote sustainable development and business practices.

“The building is intended to be the physical manifestation of our strategy to keep the Portland region a leader in the sustainability field,” said institute Director Rob Bennett, who works for the Portland office of Sustainable Development.

PDC solicited bids for a feasibility study for the project in January. The study will show whether such a “living building” can be built on a PDC-owned parcel of land at Southwest Montgomery Street and Fifth Avenue.

Four teams presented their qualifications to participate in the study at a packed meeting in the Portland City Council chambers on Feb. 26.

The living building concept was developed by the Cascadia Region Green Building Council, the regional chapter of the U.S. Green Building Council. The chapter — which has a Portland office and stretches from Oregon through British Columbia to Alaska — developed what it calls the Living Building Challenge as deliberate attempt to raise the bar for sustainable developments above the LEED standards.

The challenge requirements are included in the PDC’s study request. They cover everything from the kind of site where a structure can be built to acceptable construction materials to energy, water and sewer use.

The challenge was unveiled in 2006 at Greenbuild, an international gathering of public agencies, architects, developers and others interested in sustainable building practices held in Denver. Although dozens of people and businesses around the world have started working on projects since then, none has been completed, in part because the requirements are so high.

“This is a young project, and we still have a lot to learn,” said Eden Brukman, the Cascade Region Green Building Council’s research director.

Three other living building projects have been proposed in Portland, including an apartment building in North Portland, a community center in North Portland, and a house in Southeast Portland. The apartment building and house projects have been delayed; the community center is still in the planning phase.

Brukman is confident that someone will complete a building that complies with the Living Building requirements in the foreseeable future.

“This is supposed to be a challenge, not an impossible,” she said.