

Green Building Case Study: First Unitarian Church of Portland, Oregon



First Unitarian Church's new Buchanan Building was built out of a firmly-held conviction that religious institutions should play a role in addressing global warming and its effects. Minister Rev. Dr. Marilyn Sewell says when her congregation realized they'd need a new facility to accommodate their children and adult education and community programs, they wanted to build it with the seven principles of the Unitarian Universalist church in mind--in particular, "respect for the interdependent web of all existence of which we are a part."

To follow that principle, Sewell says the church incorporated as many green building elements in the Buchanan Building as they could. "We must set an example by leading, and one clear way to do that is to get our own houses (worship and personal) in order."

Gold LEED Certification: The 20,000 square foot Buchanan Building is among the first faith-based projects in the United States to receive a Leadership in Energy and Design, or LEED, Gold certification. It earned that distinction because the designers, Thomas Hacker Architects, and the congregation made wise choices about heating and lighting the building. The church installed greenhouse gas-free mechanical equipment in the HVAC system. Outside the building they lined the roof with high-reflective material to minimize heat gain in the summer. Both these measures cut the amount of carbon dioxide and greenhouse gases created to power the heating and cooling system; with less use of the system, First Unitarian also saves money on their electricity and gas bills.

To address the issue of energy use for lighting, the architects looked first to nature. The Buchanan Building was designed with lots of windows on the north and south sides to take advantage of as much natural light as possible. To make the best use of the light, the church installed sensors in each room that monitor the strength of the outside light and adjust the interior lights accordingly. As with the heating and cooling, limiting how much electricity is used to power the lights cuts down on greenhouse gas emissions and on electricity costs.

"Green" Means More than Energy Savings: The design and construction of the Buchanan Building takes into account not only energy use but resource use. Recycled materials appear in several parts of the building. The insulation is made of old jeans and recycled cotton; the countertops are "Paper Stone," a product made from recycled shopping bags; the carpet was made out of recycled plastic bottles. The bricks and concrete forms used in the Buchanan building were all made within 50 miles of the church to minimize fuel consumption with long-distance shipping.

First Unitarian even kept resource use in mind when it prepared the site for construction. Several old buildings had to be taken down to put up the Buchan Building. The builders didn't let that wood, brick or glass go to waste. Over 90 percent of the demolition waste was recycled or otherwise diverted from the landfill.

Fundraising Built on History and Mission: When it came time to raise the \$7.6 million to build the Buchan Building, the church's fundraising committees approached the effort in steps. Rather than focus first on how much needed to be raised or look for a large gift to start things off, they instead focused on the story of the church. For 140 years, First Unitarian Church has worked in downtown Portland, serving the poor and advocating for social justice. The congregation has also worked with the local community to strive for global peace and economic justice. The design of the Buchan Building continues that history by incorporating community meeting spaces and office space for outside organizations whose mission reflects First Unitarian's mission.

Although it may not seem obvious at first, the green building design honors the last 140 years and takes the church's work to the next level. "Future generations will suffer from climate change that will bring floods, droughts, storms, displacement of millions, lack of safe water," says Sewell. "The brunt of the hardship will fall on the poorest of the poor, and our ethics demand that we protect the weakest among us, not let them suffer the most."

Individual Gifts Make the Difference: With the church's story and mission firmly in people's minds, the fundraising committee began to ask for donations. Capital projects of this size are often supported by several large donations, but First Unitarian's fundraising campaign didn't work out that way. Aside from a generous \$2 million donation from Jane Buchan, the daughter of longtime members Colin and Melissa Buchan, the bulk of the support came from more than 1,100 individuals and families in the church. Member Allison Frost says she's glad it worked out that way. "I totally feel a sense of ownership and pride.... I was sitting in the (new) fifth grade classroom, and I thought, 'Yeah, I built this room.'" A critical learning for the fundraising team was that people are more motivated to give to a compelling vision than to a "need."



Sunlight streams in on new children's classrooms.

Mission Fulfilled: The Buchan Building was dedicated on September 16, 2007. In just a short time, it is living up to its mission. Six peace and justice groups, including the Portland AIDS Coalition and Veterans for Peace, now call the lower level of the building home. The national headquarters of the Unitarian Universalist Ministry for Earth is also there.

First Unitarian continues to lead by example when it comes to the environment. The congregation is pursuing installing solar panels on its roof in 2008 in partnership with Oregon Interfaith Power and Light.

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