



Retrofitting Homes for Energy Efficiency in Portland

Issue: Environmental Conservation | Location: Oregon, United States

The Story

An estimated 40 percent of carbon dioxide pollution in the United States comes from energy used in homes. In Portland, Oregon, the Bureau of Planning and Sustainability wanted to reduce greenhouse gas emissions in the city while bettering the economic and social development of local residents and businesses. In 2009, stakeholders came together to draft a plan designed to provide energy upgrades to 500 Portland homes and cut energy consumption by 10 to 30 percent using an innovating financing model to eliminate the upfront costs that deterred homeowners from pursuing environmentally-friendly energy retrofits. Led by Derek Smith, a sustainability expert with a record of working in the private, public, and non-profit sectors, collaborators came together to create Clean Energy Works Portland (CEWP), an innovative program that used a revolving loan to finance upgrades, working with local contractors to add high-quality jobs to the economy which resulted in a reduction of twenty percent or greater energy consumption in most participating homes.

Government

City of Portland Bureau of Planning and Sustainability

Convened stakeholders Led city efforts to establish the program and provided seed money through use of Recovery Act funds from the Energy

Efficiency and Conservation **Block Grant**

Office of the Mayor

Appointed a Stakeholder and Implementation Committee to oversee CEWP's implementation of the Community Workforce Agreement

The Collaboration

The Intersector Result

of Addressing the Issue A first in the nation and a model for private-sector funded energy upgrades, the CEWP pilot facilitated 584 loans for wholehome energy retrofits, resulting in a 20 percent or greater reduction of energy consumption in homes and a reduction of 1,400 metric tons of annual carbon emissions. Equity commitments provided employment for more than 400 workers, with their average wages surpassing \$20/hour. Half of the hours worked were by minorities, while more than 20 percent of participating construction firms were operated by minority business owners.

Share Discretion

Non-Profit

Worksystems, Inc.

Helped develop and support a pipeline of trained workers from qualified training programs

Craft3

Provided loans to homeowners for energy upgrades

Energy Trust of Oregon

Provided technical expertise for upgrades, and loans

Green for All

Helped the City develop the program with "triple bottom line" returns

Business

National Association of Minority Contractors (NAMCO)

Complied with standards set forth in the Governance Community Workforce Agreement (CWA) which included hiring practices and standards for women and minorityowned companies and workers

Utility companies including Portland General Electric and **Pacific Power**

Agreed to incorporate payment for upgrades into utility bills

The Leadership

Since the late 1990s, Derek has been active in triple bottom line efforts – incorporating considerations for social, environmental, and business effects – that aim to include sustainability into business models and ventures. He has experience in the public sector working for the City of Portland, in brand management for the private sector, and in helping shape a sustainability strategy for the non-profit organization Mercy Corps. His cross-sector experience allowed him to lead the successful pilot of Clean Energy Works Portland and its successor, the state-wide initiative Clean Energy Works Oregon.



Intellectual Thread

Derek has over ten years experience in the sustainability industry. He achieved his MBA from the University of Oregon and soon after was introduced to the emerging field of ecology and commerce. He then embarked on a career in the nascent sustainability sector. Early in his career, he worked on sustainability initiatives for a clothing catalog retailer, Norm Thomson Outfitters. Through a partnership with Environmental Defense Fund, he was instrumental in improving sustainability in the supply chain through efforts to get the catalogue industry to utilize recycled paper. His expertise in this field brought a level of knowledge useful for the Bureau of Planning and Sustainability for the City of Portland, and was instrumental in getting the Clean Energy Works Portland pilot off the ground.



Balanced Motivations

With more than ten years working in sustainability, Derek demonstrates a passion for the field; his career has allowed him to merge a desire to solve root social issues with his the capacities developed while gaining an MBA. Derek recognized the importance of incorporating sustainability into brand management and messaging, and seized his work in the private sector as an opportunity to effect change at the intersection of ecology and commerce. At the retailer Norm Thomson Outfitters, he developed one of the first sustainability initiatives for the retail industry, gaining experience in the branding and messaging aspects of product development.



Contextual Intelligence

Derek's professional experience reaches across the private, public, and non-profit sectors. His background has equipped him with an appreciation and understanding of various means through which to communicate to and among each sector. His experience in sustainability in the private sector informs his decision to frame gains in the context of a triple-bottom line. His work for the non-profit Mercy Corps provided exposure to the social mission common to non-profits. Finally, he united this diverse exposure in his public position at the Portland Bureau of Planning and Sustainability, where his ability to understand each sector allowed him to facilitate development of a sustainable loan program for Portland residents.



Transferable Skills

As part of the management team for a start-up environmental paint company, YOLO Colorhouse, Derek was able to improve operations and brand strategy that lead to 500 percent annual growth. He was able to bring insight on operational efficiency from working in the private sector to the City of Portland's Bureau of Planning and Sustainability, the public department responsible for Clean Energy Works Portland and the CEWP pilot program. His management skills were complemented by his background in branding and organizational messaging, which helped him create a vision for Clean Energy Works Portland that pulled from a diverse set of stakeholders to create a common agenda.

The Toolkit



Establish transparency of viewpoints

Allowing participants the space to represent their own self-interests was a preliminary step in establishing common goals of the collaboration. CEWP partners represented a variety of power differentials, where some participants had more power than others. CEWP members represented diverse segments of the community, from owners of small businesses to CEOs of local and state energy companies. Recognizing this power dynamic, and facilitating meetings to foster the open and equal dialogue of participants allowed partners to move forward and focus on what could be achieved instead of what could not.



Establish a governance structure

The Steering Committee included stakeholders from all sectors, including building owners, Energy Trust, ShoreBank Enterprise Cascadia (now Craft3), the City of Portland, private utility companies, Multonomah County, Green For All, and Worksystems, Inc. The participants were each assigned responsibility according to their area of expertise, and held regular meetings under the guidance of a facilitator throughout the project to decide next steps. There were four inclusive stakeholder meetings, with generally 15-25 attendants at each. Participants included City representatives, contractors, the workforce agency, community groups, as well as pre-apprenticeship programmers. Meetings resulted in deliberation that guided overall strategy of CEWP implementation and structured decision-making to include input from diverse members of the community. Members would create an action plan, and then periodically review progress in order to better inform program development.



Share a vision of success

Although participants came from a variety of organizations across sectors, all of them were committed to the core issues that CEWP aimed to address – namely sustainability and equity challenges in the city. Among action areas with extensive support was the equity issue and commitment to the target of reaching inclusion milestones for minority and underrepresented populations. Community members who participated in CEWP met regularly to set the criteria for success – a sustainable means of retrofitting home energy upgrades that would also positively impact and support minority and women owned economic development.



Recruit a powerful sponsor or champion

Mayor Sam Adams was committed to ensuring the collaboration moved forward. His office had a focus on the issue of equity and his support was a key factor for the collaboration's success. Realizing that women and people of color are often excluded from processes and decision-making, Mayor Adams had high-level of engagement in the meetings for the collaboration which he attended, from the first stakeholder meeting to the final program meeting. He was personally vested in the equity template established by the Community Workforce Agreement, demonstrated by his presence in Stakeholder meetings, and this encouraged additional support for the implementation of hiring standards to support marginalized communities outlined in the document. In March 2011, Mayor Adams issued a statement highlighting the success of CEWP, alerting the public to its statewide successor program, Clean Energy Works Oregon, and thanking the diverse participants from the public, non-profit, and private sectors that made the program a success.



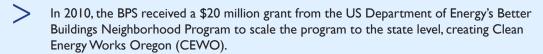
Evaluate change

Mayor Sam Adams appointed an additional CEWP committee, the Stakeholder Evaluation and Implementation Committee, whose members were nominated by Community Workforce Agreement (CWA) stakeholders. This committee, which represented a mix of stakeholders involved in the CWA process, had the explicit goal of including at least 50 percent of participants from historically disadvantaged or underrepresented populations, including minorities and women. The committee was established to help set standards and community benefits, accountability strategies for non-compliance as well as recognition of excellence, to evaluate progress toward standards and community benefits, evaluate program participation rates of women and minorities, and finally identify ongoing resources needed to move the collaboration forward. The success of the CWA in Portland sometimes surpassed its original goals; For example, 23 percent of pilot dollars went to minority- or womenowned businesses, while the original CWA goal was set at 20 percent. Project indicators pointed to strong success for the equity aspect of the CEWP, in addition to the positive sustainability results.

The Intersector Result

Clean Energy Works Portland was an innovative pilot program that addressed social issues of equity while providing homeowners an affordable opportunity to retrofit their homes with energy efficient upgrades. The collaboration had a total of 584 loans for whole-home energy upgrades. Repayment for the loans was conveniently incorporated into homeowners' existing utility bills, increasing the feasibility of energy retrofits for local residents. The pilot program resulted in a 20 percent or greater reduction of energy consumption in homes, and 1,400 metric tons of annual carbon emissions reductions. CEWP also achieved high standards in equity employment, employing more than 400 workers with average wages surpassing \$20/hour. Additionally, 80 percent of participating construction firms provided health benefits for their employees. Half of the hours worked by minorities, and employees include double the national rate of women construction workers. The collaboration's success exceeded the expectation of stakeholders with 94 percent of homeowners recommending the program. Continuing successes include:





"Cross-sector collaborations are the most practical and effective way to make progress in this era of massive resource constraints and necessary economic realignment."

— Derek Smith, CEO, Clean Energy Works Oregon