BOSTON

Emerald Cities-Boston Contractor Academy: Diversifying and Expanding the Workforce for Net Zero Buildings

Net Zero on the Horizon

In 2019 the City of Boston announced plans to reach net zero emissions by 2050. That same year, the Boston Green Ribbon Commission (GRC), a group of business, institutional, and civic leaders working to fight climate change, released a report—commissioned in 2016 by Marty Walsh, then Boston's mayor and now the U.S. secretary of labor—showing that the city's building stock produced 75 percent of Boston's greenhouse gases. "Nearly every building in Boston will need to undergo retrofits that holistically and dramatically reduce energy consumption," noted the GRC report. It pointed out that "85 percent of projected building square footage in Boston in 2050 exists today. For carbon neutrality, nearly all of the existing buildings in the city will need to undergo deep energy retrofits that are designed and implemented with a 'whole building' approach. A piecemeal approach... will not result in the necessary emission reductions."

To make that goal achievable, the City of Boston partnered with the American Cities Climate Challenge for technical help and laid out a series of initiatives that could chip away at Boston's greenhouse gas (GHG) emissions. Among the projects designed to help the city meet its goals were a new building emissions performance standard that creates targets for ramping down GHGs, additional financing options for emissions-lowering projects, a retrofit pilot for multifamily affordable housing, and additional building contractor training.

The City of Boston recognized they needed to significantly expand their workforce. "However, capable

"The city has since broken the work up into smaller contracts and made other changes that we're hopeful will make it more accessible for contractors to get in the door."

—Daryl Wright, the chief strategy officer for ECC in Boston.

contractors to help convert Boston's building stock for a more sustainable future were in short supply. Furthermore, many minority and women-run construction contractors didn't have access to projects." Even with a successful business, contractors can have difficulty obtaining government contracts due to abstruse procurement requirements or prohibitive insurance costs. To help fuel the growing demand in the sector and promote equity by elevating minority, disadvantaged, and women-owned business enterprises (MWBEs), Boston and NRDC teamed up with Climate Challenge partner Emerald Cities Collaborative (ECC), whose Boston Contractor Academy connects small and medium-size minority contractors with renewable and energy efficiency retrofit project pipelines overseen by city government, state government, and utilities.

Expanding a Diverse Workforce for Net Zero Buildings

Unlike other job training programs designed to reorient members of the labor force toward new industries they've never worked in, the Emerald Cities-Boston Contractor Academy seeks contractors who already have the skills required to perform building retrofits. The academy emphasizes business development—focusing on areas that help participants win contracts for energy efficiency, retrofit, and renewables projects. The academy works as a conduit, facilitating connections between small Massachusetts-based woman- and minority-owned contractors and the government agencies and private companies that could use their work.

The relationship between the City of Boston and ECC wasn't initially planned. As Boston ramped up its carbon reduction policies, ECC simply saw a growing demand for contractors in the city and launched a local chapter. As ECC continued to train contractors and the city worked to reduce GHG emissions, the relationship became closer. And Boston's commitment to lowering greenhouse gases provided the opportunity to address the long-standing disparity in city contracts.

"There had been a lot of publicity around the city of Boston's abysmal performance when it comes to minority contracting," says Daryl Wright, the chief strategy officer for ECC in Boston. "Less than 1 percent of all contracts—not just construction—included Black contractors." Previously, ECC was already offering training programs in Seattle, Los Angeles, and California's San Francisco Bay Area and was seeking a new city for expansion. Meanwhile, the City of Boston was seeking solutions. "We were in a position to help each other," Wright recalls.

When looking to expand into a new city, ECC is extremely intentional. A decade ago, the American Recovery and Reinvestment Act (ARRA) implemented a series of job training programs in the shadow of the Great Recession. But without a demand for workers, the programs simply prepared participants for jobs that didn't exist. By contrast, ECC's goal is to help contractors connect to existing energy efficiency and clean energy pipelines of projects and expand the demand for diverse workers.

Broadening the Pipeline and Demand for Diverse Workers

In Boston, ECC's business development curriculum has three parts: exposing participants to existing contract opportunities, strengthening general business practices, and executing a strategy to enter the sustainable retrofitting sector of the contracting industry. The first component requires familiarization with the entities offering work as part of city and state carbon-cutting efforts. The second involves beefing up back office support, marketing, growth, and strategy development. "[This industry] has very specific procurement requirements," says Wright. "These are some of the core capabilities that you would need in order to attain those contracts." The third piece of the contractor academy prepares participants for some of the specific features of Boston's retrofit labor market: high labor density, high insurance and bonding requirements, and project labor agreement reguirements. Those features can become serious barriers to work. Wright recalls when one prime contractor, which was seeking subcontractors from ECC's academy under the city of Boston's energy services contract, required a bond of \$1 million and had similarly priced insurance requirements. That's out of reach for most academy participants, whose companies tend to have annual revenues closer to \$500,000.

Since 2019, nearly 40 contractors have taken the Emerald Cities—Boston Contractor Academy nine-week course. Most are contractor business owners with 7 to 10 years in the business. So far, about three-fourths have completed the class, with a slight drop in retention when in-person classes pivoted to Zoom in March of 2020 in response to the COVID-19 pandemic.

Once a contractor completes the ECC course, the relationship with the organization rarely ends. "We knew that part of our credibility was going to be not just about having a delightful training," Wright says, "but really making sure that folks are actually securing contracts." In addition to the course, ECC established a 15-member advisory committee—with some seats occupied by big names and organizations in the Boston contracting world, including the City itself—to help connect contractors who complete the course with work. Others on the committee include a local building trade union (the Building and Construction Trades Council of the Metropolitan District), the New England utility companies Eversource and National Grid, the National Association of Energy Services Companies, and Suffolk Construction, a major construction contracting company. "We just found different ways that we could create mutually beneficial relationships," Wright says. "In Boston we got such a positive reception and there were all these opportunities."

Wright recalls when the City of Boston encouraged an energy services company (ESCO) working for the city to offer subcontract opportunities to companies whose owners had taken ECC's course, but found that contract requirements prevented smaller businesses from bidding. "We spoke to the city and basically said, 'Okay, this is what we're hearing from contractors: The way things are currently structured, few, if any, can access this contract pipeline,' " Wright says. The ESCO was under no obligation but ultimately made changes that allowed a smaller HVAC company to be awarded a contract. Boston didn't

stop with a single show of good faith. "The city has since broken the work up into smaller contracts," says Wright, "and made other changes that we're hopeful will make it more accessible for contractors to get in the door."

Building Trust through a Broader Suite of Support Services

During Emerald Cities-Boston Contractor Academy sessions, contractors vented their frustration with a system that had long been an obstacle to their participation rather than a support. One particular source of ire was the Boston Disparity Study, a city-commissioned report on inequity that many contractors felt had been delayed far too long. Others were suspicious of ECC. When recruiting contractors, Wright recalls, "we were hearing, 'Well, this is the same as ARRA, right? That didn't work. What's so different about you?' "

Even if those contractors are now able to more easily connect to work opportunities, pricey bond and insurance requirements—along with general access to capital—still pose challenges that need to be addressed at a structural level. In the meantime, Wright is looking for ECC to expand its own role in helping minority, disadvantaged, and woman-owned businesses overcome those hurdles, through additional contractor academy sessions and a broader suite of support services. "That will go a long way, both for the city of Boston and for the region," he says.