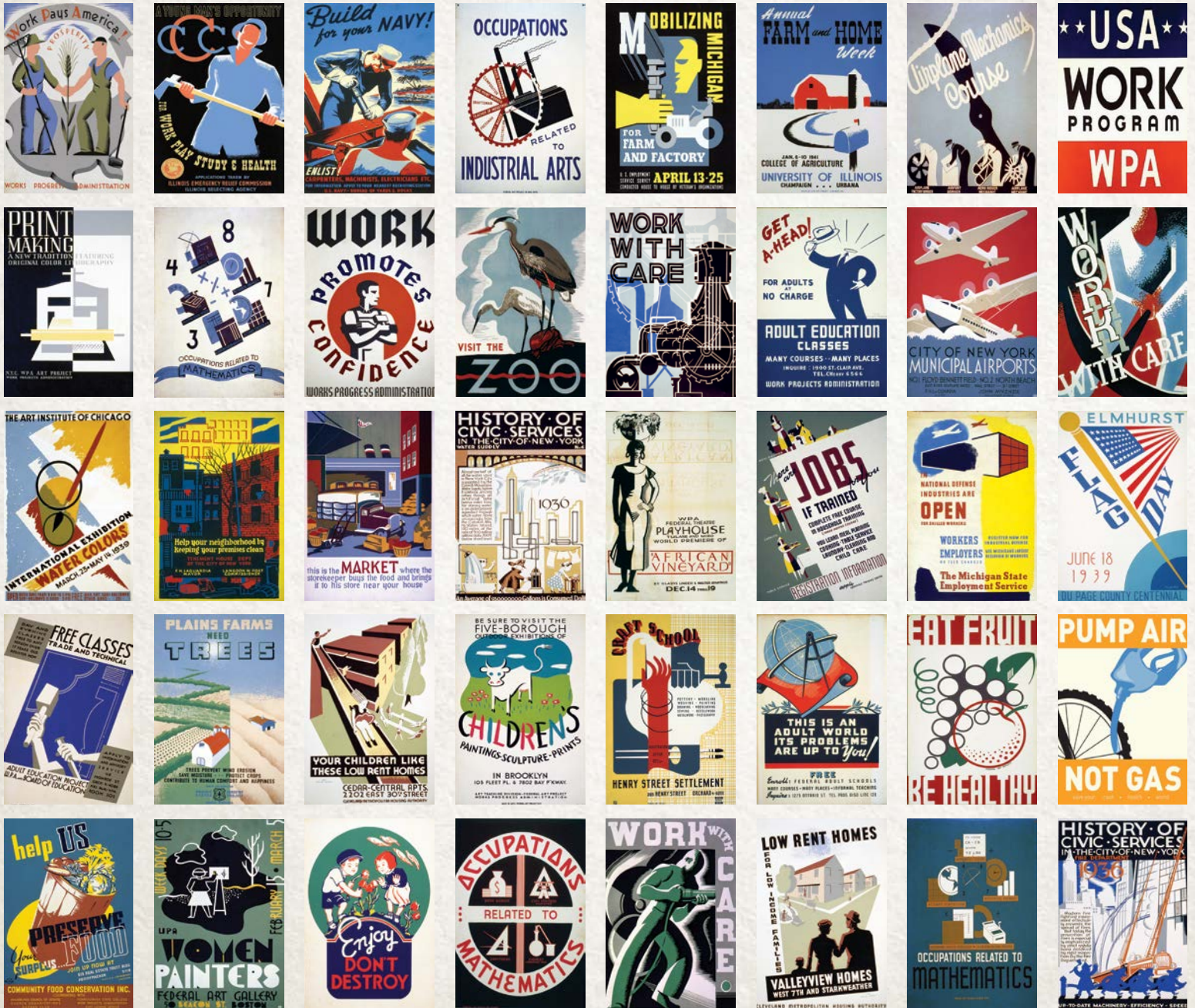


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MANUFACTURING

Two production giants are banking on domestic manufacturing with investments in sustainable facilities and operations.

GREEN

The Affordable Green Neighborhoods Grant Program aids housing projects in the pursuit of LEED certification.

JOBS

Veterans for sustainability, an idea generated in Fort Lauderdale, Florida, is taking shape and moving across the country.



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ON THE COVER

The Work Projects Administration (WPA) Poster Collection. A sample of the 2,000 posters produced from 1936 to 1943 by various branches of the WPA that were designed to publicize job opportunities, community activities, theatrical productions, and health and educational programs.

Posters in this collection were made by artists working for the Works Projects Administration, a "New Deal" program of the U.S. Government.

Credit: Library of Congress, Prints & Photographs Division, WPA Poster Collection. www.loc.gov



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 Professor at San Francisco State University and co-founder of (I-SEED)

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CONTRIBUTING WRITERS

Eric Butterman
Jeff Harder
Calvin Hennick

Kiley Jacques
Judith Nemes

CONTRIBUTING PHOTOGRAPHERS

Fawn DeVinney
Chris Hamilton
Melody Ko
Katie Noble

Gary John Norman
Eric Roth
George Tenney

CONTRIBUTING ILLUSTRATORS

Rosanna Giorlandino
Melissa McGill

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AS OF MARCH, 2015

Total commercial LEED projects globally ▶ **69,394**

CERTIFIED: **27,314**
CURRENTLY REGISTERED: **42,080**
LEED FOR NEIGHBORHOOD DEVELOPMENT: **417**

Gross square footage of LEED projects* ▶ **13.2 Billion**
Includes LEED-certified, LEED-registered

LEED for Homes Units ▶ **185,374**

CERTIFIED UNITS: **75,230**

*Excludes ND and LEED for Homes

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Turning Adversity into Opportunity: Ghettos and Slums as Hotbeds of Green Innovation



ANTWI A. AKOM, PH.D.

Professor at San Francisco State University
and co-founder of (I-SEED)

I recently gave a TEDx talk on Mastering TAO. Not TAOism in terms of Eastern philosophy—although, in some ways, yin and yang are a part of it—but in this case TAO stands for Turning Adversity into Opportunity. I call the people, places, and policies that have mastered the art of Turning Adversity into Opportunity “Hope Dealers.”

Hope Dealers ask questions like: What kinds of public and private investments in green infrastructure can help us innovate our way out of poverty? How are our ghettos, slums, and barrios hotbeds of green innovation? What is the role of so-called “slum dwellers” in the future of green cities and in building the green economy? And how can we change the negative narrative of “slum dwellers” so that they can be seen for who and what they are—everyday people and community members—not slums, but neighborhoods with families living, working, playing, praying, loving, living, eating, drinking, walking, biking, and taking their kids to and from school.

An estimated one billion people live in slums all over the world, where they typically face inadequate housing structures, enormous environmental health hazards, land use rights, safety threats, vulnerability, and social exclusion. These communities are often beyond city planning and regulation, and account for more than 30 percent of the developing world’s urban population. This means 1 in 7 people on the planet are experiencing spatial—and to a certain extent 20th-century remnants—of racial apartheid. The most formidable challenge of the 21st-century city then—in the face of massive population growth, climate change, and rapid urbanization—is extending clean energy, water, sanitation, parks, protected pathways, greenways, bus-ways, health services, Leadership in Energy and Environmental Design (LEED), and especially

LEED for Neighborhood Development—to informal settlements.

Mastering TAO and understanding how slums and ghettos can be transformed into hotbeds of green innovation are critical for the USGBC, EcoDistricts, Urban Land Institute, and others who want to grow and fulfill their promise of “democratizing development” (without displacement) and “scaling sustainability.” Their tools, products, and resources must become more culturally and community responsive to the fastest-growing demographics and the fastest-growing cities. In other words, “Greening the Ghetto,” as my friend and MacArthur Genius Award winner Majora Carter said many years ago, is the next frontier.

Mastering the art of Turning Adversity into Opportunity through culturally and community responsive technology platforms, democratizing data, and decisionmaking gives us the power to transform the way we do business, build community, and accelerate sustainable neighborhood development from the ground up. It is the missing link in green and healthy built environment conversations, and is central to the concept of building healthy, resilient, and vibrant communities.

Hope Dealers also show that we can have development without displacement, social equity, clean energy, green healthy schools, and economic development for everyone so that people do not have to leave their communities in order to live, learn, work, and thrive. Hope Dealers understand what some of us too often forget—that we are much stronger together than we are alone. So be a Hope Dealer.

LEED ON,

 For more, visit plus.usgbc.org.



CONTRIBUTORS

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CALVIN HENNICK

has written feature stories for a number of national magazines and newspapers including the *Boston Globe*, *The Philadelphia Inquirer*, *New York Press*, *Men's Health*, *Running Magazine*, and *Eating Well* among others. He is a creative writing instructor at the University of Massachusetts.

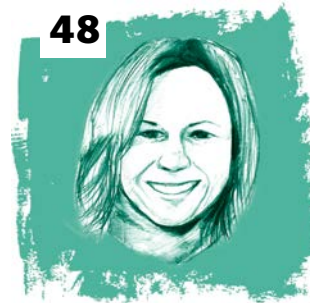
40



JEFF HARDER

is a journalist who has written for *Triathlete Magazine*, the *Boston Globe Magazine*, *Cape Cod Life* magazine, *New Old House* magazine, *HowStuffWorks.com*, and many other outlets. He lives in Massachusetts.

48



KILEY JACQUES

is a feature writer living on the North Shore of Massachusetts where she serves as managing editor of a regional lifestyle magazine. She has been published in *New Old House*, *Energy of the City*, *Myopia Polo*, and *Ocean Home* magazines, as well as various trade publications and media outlets.

40



ERIC BUTTERMAN

has written for more than 50 publications, including *Men's Journal* and *St. Louis Magazine*. His articles have covered everything from solar car racing to the fight against malaria. Butterman has also lectured at many educational institutions, including NYU and Harvard.

58



JUDITH NEMES

is a journalist specializing in green issues and urban/corporate sustainability. She has written for the *Chicago Tribune*, *USA Today's Green Living Magazine*, *Michigan Avenue Magazine*, and *GreenBiz.com*. She's also an adjunct professor in the journalism department at Columbia College Chicago, where she designed a class on reporting on green issues and urban sustainability.

ILLUSTRATIONS BY ROSANNA GIORLANDINO

A hand is shown holding a black frame containing a green graphic. The graphic features the text "BUILD YOUR POTENTIAL" in large, white, bold, sans-serif capital letters. The background of the graphic is a green-tinted image of a modern city skyline with several skyscrapers. Below the frame, a hand-drawn sketch of a city street with various buildings and trees is visible.

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SKILL Builders

For almost 40 years, YouthBuild has guided underprivileged young adults into constructive careers and lives.

BY JEFF HARDER

Four years ago, Amir Mans was a son without a future. The father with whom he shared a Section 8 apartment in upstate New York had passed away. Mans was 20 years old, he had dropped out of high school years before, and he had no job, no money, and no direction. “At that point in time, my back was against the wall, and I had nothing else to lose,” he says.

Then his girlfriend told him about YouthBuild Schenectady. For the next nine months, Mans woke up early each day to study all the subjects he had sidestepped and learn the intricacies of weatherizing homes. He found counselors who helped him get his GED—and helped him get through the weeks when there was no food in his cupboards. He earned an alphabet’s worth of certifications (BPI, Lead Safe Worker Practices Certification, and OSHA to name a few) and found a new career. In time, he found that he had a future after all.

Stories like these aren’t the exception for graduates of YouthBuild—they’re the rule. For 37 years, the organization has provided education, job skills, and real-world work experience to underprivileged teens and young adults by mobilizing them to build and rehabilitate affordable housing in communities around the country. Since 1994, more than 130,000 YouthBuild students have built more than 28,000 units of affordable housing. And for the last decade,

YouthBuild USA’s Green Initiative has been harnessing sustainable building principles, bringing healthy housing to the people who need them most. “The outcomes are quality green homes, but along the way, we’re building character, a sense of service, and providing skills that help people move on to decent careers and higher education,” says Chris Cato, the Green Initiative’s project manager. “What we’re doing goes beyond building homes.”

YouthBuild began in 1978, when founder and CEO Dorothy Stoneman organized young people in East Harlem, New York, to renovate a dilapidated tenement building. Today, YouthBuild USA, a national nonprofit headquartered in Somerville, Massachusetts, supports 260 local programs in the U.S., fueled with funds from government agencies and private supporters. The specifics of each independently operating program vary by location, but their audience is the same: 16- to 24-year-olds who are escaping hardship, whether it’s an abusive home, substance abuse, a criminal past, or unemployment, 93 percent of whom lack a high school diploma. “The overarching mission of YouthBuild USA is to unleash the intelligence and positive energy of low-income youth to rebuild their communities and their own lives at the same time,” says Eva Blake, senior director of green initiatives at YouthBuild USA.

“The overarching mission of YouthBuild USA is to unleash the intelligence and positive energy of low-income youth to rebuild their communities and their own lives at the same time.” –EVA BLAKE



Amir Mans found a new career weatherizing houses through YouthBuild.



PHOTOS OF CHRIS CATO AND EVA BLAKE BY KATIE NOBLE

And while some YouthBuild programs offer studies in health care and technology, construction is a particularly viable field for hands-on learners, whether the goal is a good job or a degree in building science or a related field. To get there, each YouthBuild student spends roughly nine months navigating a curriculum evenly divided between time spent in the classroom and the job site. In the classroom, they study for their high school diploma or its equivalent, and complete requirements for certifications from OSHA, the National Center for Construction Education and Research, the Building Performance Institute, the Home Builders Institute, and other organizations. On the job site, they build and renovate affordable housing, from single-family homes to gut rehabs of existing properties, often in conjunction with local housing authorities. Throughout the program, students receive counseling and case management for debt, childcare, legal issues, and other obstacles. "When a young person gets a chance to work on a property that's been run down, beat down, and abused, through the process of repairing and rebuilding it and making it a high-quality environment for a low-income family, that mirrors the work they're doing in their personal life," Cato says.

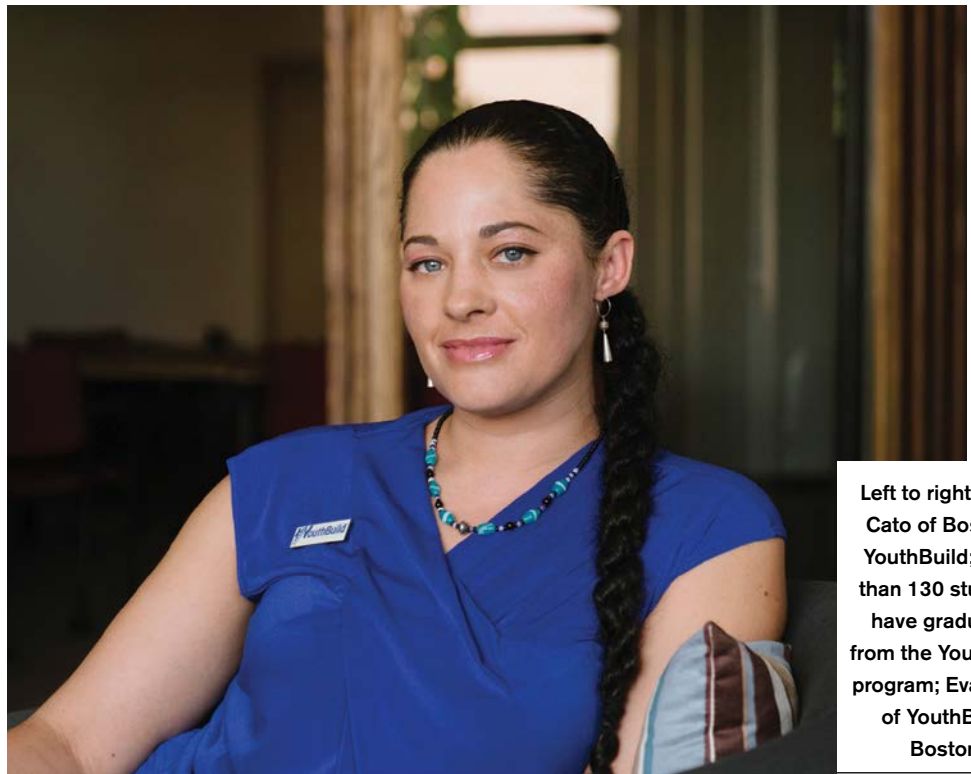
In 2005, Blake and Cato launched the Green Initiative to equip YouthBuild programs with the training and support to build green homes. Traditionally, affordable housing units reflect flaws like toxic building materials, shoddy construction, and poor insulation—unhealthy environments can exacerbate their residents' troubles by keeping them home sick instead at school or work, Cato says. And very often, these homes' wasteful energy consumption can lead low-income families to homelessness because they can't pay their utility bills. "If

you go into a property, retrofit it or rehab it, make it energy efficient, and reduce costs by 30 percent, you may be saving a family from becoming homeless." Additionally, Blake says, green building practices help YouthBuild students stay marketable. "To be competitive in today's construction industry, you need to know something about green building."

Within the last year, 44 percent of the units built or rehabbed by YouthBuild students were reported to be green, 300 were ENERGY STAR Homes, almost 300 were Leadership in Energy and Environmental Design (LEED) certified, and over 650 have been weatherized. Blake says that so far, 9 percent of all job placements for YouthBuild graduates have been in green jobs.

Casa Verde Builders, a YouthBuild program in Austin, Texas, spearheaded many of the green building best practices now in use at YouthBuild programs throughout the country. In recent years, Ted Roan, YouthBuild's director of green construction and a 16-year veteran of Casa Verde, began traveling the country to teach the YouthBuild construction trainers who instruct students how to weave green building strategies into their projects, like alternative framing ideas to conserve materials, design tweaks to maximize energy efficiency, and the basics of air sealing. "We have 260 programs nationwide, and I'm doing my best to make all of them as green as Casa Verde," he says.

During his travels, Roan has watched the positive impacts of green affordable housing ripple beyond the building's footprint. "I've seen it firsthand in Austin and in other places: The more homes that are built by YouthBuild, the more the community becomes involved, and some of the local municipalities say, 'If we had more homes that were



Left to right: Chris Cato of Boston's YouthBuild; more than 130 students have graduated from the YouthBuild program; Eva Blake of YouthBuild Boston.

saving 30 percent on their energy bill, we won't have to build a new power plant," Roan says. "They're thinking about what it means to the municipality, but they're taking their lead from these projects."

In particular, YouthBuild's LEED-certified affordable homes have become buzz-generating icons—living proof that green building works for low-income housing as much as million-dollar office buildings. In March 2009, to demonstrate the organization's embrace of sustainable building practices, YouthBuild members from around the country convened on the National Mall in Washington, D.C., to build a green, affordable, single-family home. The home was later shipped to Brownsville, Texas, and completed by YouthBuild Brownsville before receiving LEED Silver certification—the first LEED for Homes house built in the Rio Grande Valley, Blake says. YouthBuild programs were among the first to bring LEED-certified affordable homes to Fall River, Massachusetts; Rockford and Waukegan, Illinois; Philadelphia, Pennsylvania; and Akron, Ohio. Through a partnership with a global building materials company, Saint-Gobain and subsidiary CertainTeed, Akron Summit YouthBuild gut-rehabbed a duplex in Akron. The dwelling earned a LEED Platinum rating, making it the first home in the city to receive that designation—and just the seventh in the Buckeye State.

Since becoming members of the U.S. Green Building Council in 2009, the relationship between YouthBuild and the USGBC has grown stronger. Along with providing increased training and encouraging projects to seek formal LEED certification, USGBC scholarships enabled selected YouthBuild staff and graduates from around the country to attend Greenbuild International Conference and Expo and

learn about the wider sustainability movement. During the last five conferences in Chicago, Toronto, Philadelphia, San Francisco, and New Orleans, local YouthBuild affiliates have staffed booths and shared their experiences with fellow attendees. "Those scholarships have been invaluable in transforming the mindsets of the scholars who attended, and in general, this partnership has been great in exposing more young people to the ideas of green building and green strategy," Roan says. As a result, many YouthBuild graduates have entered the workforce as green construction workers and weatherization installers.

Beyond the paychecks YouthBuild graduates earn and the homes they build, there are even greater transformations in the lives of YouthBuild's students. One young man showed up to his YouthBuild program in Idaho wearing a GPS ankle bracelet, only to have it removed four months later when a judge saw all the progress he'd made. Another in Texas went from criminal to master electrician thanks to YouthBuild, then returned to the program year after year to speak with new students and encourage them to stick around at all costs.

Then there's Amir Mans. Upon graduation YouthBuild Schenectady helped him find a local job in weatherization. For the last three years, he's been working as a contractor, insulating houses and advancing within his company. Instead of faltering at a critical time in his life and becoming a cautionary tale, Mans became something of a role model: One of his friends enrolled in the Schenectady program is now making a similar life-changing journey. "For lack of a better term, I feel like I'm not a statistic any more," he says. "Ever since YouthBuild came into my life, it's been nothing but positive." So far, that positivity has been contagious. ●

POWERFUL BRAINS, Peaceful MINDS

At Harvard University—an institution synonymous with supercharged intellects—employees are learning to ease stress and feel more productive through mindfulness meditation.

BY CALVIN HENNICK

Leave it to Harvard University to make meditation more efficient. “To listen to a three-minute body-focused guided meditation, press 2,” a soothing female voice instructs callers to the school’s guided meditation hotline. “To listen to a four-minute breath-focused guided meditation, press 3.”

Callers who choose the second option are told to imagine their breath flowing gently in and out of their bodies. “When thoughts arise,” the voice says, “notice them without judging them or following them, and then gently escort your mind back to your breath.”

The hotline is one of several ways the university supports its mindfulness meditation program, which in turn is just one of many programs designed to promote employee health and well-being—one of the pillars of the school’s sustainability plan, which was released last year. The plan calls for a reduction in the Harvard community’s exposure to toxic chemicals (with an emphasis on the natural and built environment, indoor air quality, furnishings, and cleaning products; the development and implementation of sustainable and healthful food standards; and increased participation in, and access to, wellness programs.

In addition to mindfulness meditation, these programs include ones that promote physical activity and healthy eating,

as well as programs that offer access to counseling and social support, massage and acupuncture, and rest and time off.

“We’re discovering that well-being is considered an essential part of sustainability,” says Nancy Costikyan, director of Harvard’s Office of Work/Life, citing the research of University of Washington business professor Christopher Barnes. “If you think about sleep as a biomarker for well-being or work/life balance, he’s learning that people who have poor sleep are actually more likely to be worse negotiators and make poorer ethical decisions. That’s a surprising finding that shows that how we care for ourselves plays out in a range of spheres.”

Costikyan’s office began the meditation program as a joint venture with the Harvard Center for Wellness two years ago. So far, it’s only been offered to Harvard’s central administration staff, a group that numbers around 5,000 employees, including those in health services, dining services, and the school’s legal department. Facilitators come into people’s workplaces and guide them through the six-week voluntary session with their coworkers. So far, around 550 staffers have participated.

“People are incredibly enthusiastic about it,” says Costikyan. After employees complete the six-week session, some continue to come to university-organized “sits,” and



Nancy Costikyan Harvard's director of Work/Life and Jeanne Mahon director of the university's Center for Wellness began a meditation program for some of Harvard's administration staff. Photo: Eric Roth

“We’re discovering that well-being is considered an essential part of sustainability.”

—NANCY COSTIKYAN

High Marks at Harvard

In surveys, employees who participated in the mindfulness course said it changed the way they work.

- **“I feel I can better tame my distractions, which in turn makes me more productive.”**
- **“I have acquired more balance in the way I approach tough situations.”**
- **“The benefits of this program don’t just promote a way to live a more peaceful life, but a more fulfilling one.”**
- **“I learned a great deal in a short time about techniques for better relaxation and focus.”**
- **“The active listening component was surprisingly huge, and I think it helped shift how I relate to people in my office.”**
- **“I am more aware of what part I am playing in my own stress and relationships with coworkers.”**

others have even gathered on their own in empty conference rooms to meditate together. “We’re very pleased that we’re able to demonstrate that this has wide, varied appeal.”

Mindfulness meditation, which has its roots in Buddhism, is a practice aimed at training a person’s attention on the present moment and accepting that moment without judgment. Often, people will sit in the familiar cross-legged position and keep a straight back, paying close attention to their breathing and casually dismissing any stray thoughts that pop into their heads.

Proponents say the practice has a wide variety of benefits to mental and physical health, including reduced stress and chronic pain, lowered blood pressure, and improved sleep. Mindfulness meditation has been used as a treatment for conditions including depression, substance abuse, and eating disorders.

In the Harvard sessions, employees do sitting meditation, learn some simple yoga stretches, and even practice “mindful eating”—an exercise in which they are given eight raisins and eat each one individually, taking care to stay hyper-aware of the look, feel, smell, and taste of the tiny dried fruits.

“It’s about being in the present moment,” says Jeanne Mahon, director of the Center for Wellness. “The idea is that it’s a way to train your attention and train your brain. It’s a quality that you try to learn so you can experience your life in each moment, and not be obsessing about what’s to come two hours from now, or what happened 20 minutes ago.”

“The class,” Mahon adds, “is designed to help people develop their own practice—something they do ten minutes a day, like formal meditation—and then learn how to apply that skill in those moments where they’re really frustrated, to note that that’s what’s happening, and then respond from a less reactive place.”

“We’re finding that they’re able to translate what they’re learning to the workplace,” says Costikyan. “People are saying, ‘I’m more productive and less emotional!’ But also they cite things like being better at communicating and listening to others.”

One employee reported that she was able to better manage pain by “riding” the feeling through mindfulness, rather than resisting it, and Costikyan says she used the technique herself on a particularly cold winter day to better handle her freezing feet. “I ‘leaned into’ the feeling, and pretty soon I was aware that my feet were cold, but the rest of me wasn’t cold.”

So, will the Nobel laureates and other luminaries that make up Harvard’s faculty soon find themselves meditating with their colleagues? It’s possible.

“We don’t go banging on people’s doors,” says Costikyan. “We wait until we’re invited.”

“Of course, we’d love to engage the universe,” Mahon says. “But,” she jokes, “we’re trying to remain in the present moment.” ●



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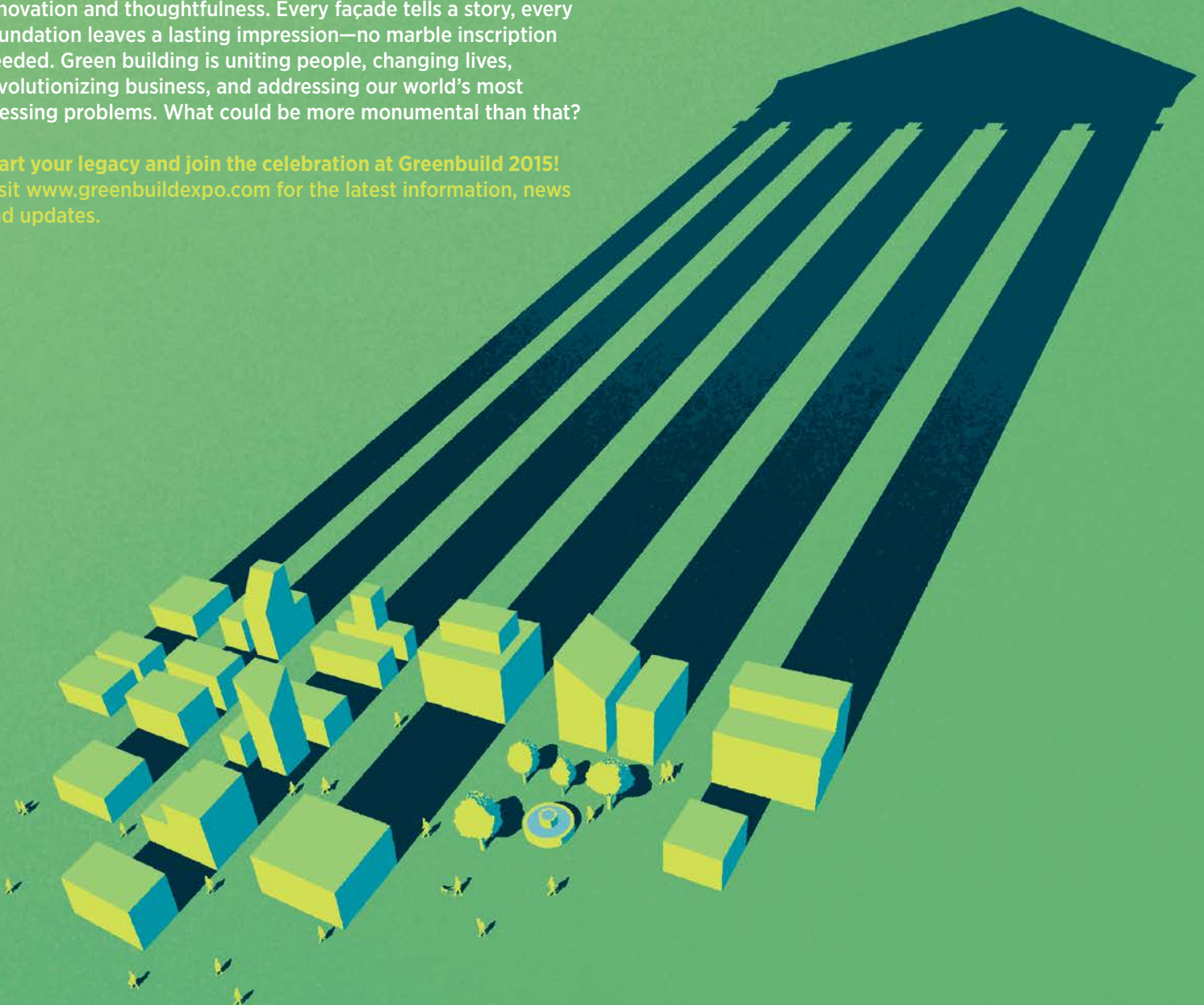
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ZONE IN THE Zone

Article 89 gives Boston a new lease on urban agriculture.

BY KILEY JACQUES

The list of favorable things former Mayor Menino did for Boston could very well run the length of Washington Street. Among the items on that list is Article 89, which permits and regulates urban agriculture as a by-right land use. No other city has anything like it.

The seed that would become Article 89 began germinating five years ago, when a farmer wished to put vacant city lots to use for food production, but couldn't secure a permit to do so. So he went to the Mayor's Office. That farmer was Glynn Lloyd—founder and CEO of City Fresh Foods, City Growers, and the Urban Farming Institute—and he is greatly responsible for getting the article off the ground and into the garden.

It wasn't long before the idea gained support from all corners of the city. By 2010, a community-based effort to draft Article 89 was well underway. Three primary entities collaborated to move the new zoning forward: the Boston Redevelopment Authority (BRA), a mayor's group comprised of urban farming advocates, and the Office of Food Initiatives—whose mission it is to increase access to fresh

food and expand opportunities for urban agriculture. "We worked very closely with the mayor's office, which was a big advantage," says BRA senior planner John (Tad) Read. "To have the weight of [his] office behind us was very powerful. This really was a bottom-up and a top-down initiative."

Other key players included Boston Natural Areas Network, which oversees many of the city's gardens, and has a long history of working with the community to promote urban agriculture. Additionally, the Trust for Public Land continues to acquire and prepare land for farmers who are not in a position, whether for technical or financial reasons, to use their own land.

Working farmers were also at the table, attending meetings and offering advice. "This is a community that is passionate about what they do," notes Read. "We found them extremely reasonable and practical." Stakeholders also included farms like the Food Project, which provides programming for at-risk youth, and operations like ReVision Urban Farm and Freight Farms. BRA planners relied on Courtney Hennessey and John Stoddard of Higher Ground Farm, among others, for their professional expertise in order



Boston neighborhood planner Marie Mercurio visits a greenhouse in Roxbury run by the Food Project. Photo: Eric Roth

to draft the rooftop-farming piece of the ordinance. “There are very competent, creative, and motivated farmers in the city—real leaders,” notes Read.

Three years and many meetings later, the article was finalized in 2013. Standards for the siting, design, maintenance, and modification of agriculture-related activities are now detailed and readily accessible. The article’s citywide implementation has meant farmers are able to grow and sell their produce in the city without bumping up against barriers.

“Article 89 makes it possible to locate in the city, close to our market and the distribution system,” says Shawn Cooney, owner of Corner Stalk—a shipping container farm in East Boston. “Without farm zoning we would have been forced out of the city to more rural suburbs...not a bad option, but it does not address the city’s need to use some of the underutilized and distressed properties in the city, and [it does] not allow us to easily access the city labor pool.”

The legislation was put into action with a pilot project on two Dorchester properties owned by the Department of Neighborhood Development (DND). “They have the land in the city and they have been extremely resourceful and

creative about making that land available for farming. They have done everything within their power to make sure [of it],” says Read.

“For the pilot farms,” explains BRA senior planner Marie Mercurio, “the zoning was merely an urban agriculture overlay versus what we have worked on [subsequently], which is the citywide zoning that became a whole urban agriculture zoning ordinance for people of the city.” To date, DND has enabled farming on three additional sites with more in the pipeline. “I think the momentum is going to continue to build,” enthuses Read.

The types of operations benefitting from the ordinance vary. Expansion by both nonprofit and for-profit farming on city-owned land has been made possible with its implementation. For-profit beneficiaries include City Growers, which sells its produce to area restaurants, and Freight Farms, among others. “There’s a [real] blend of nonprofit and for-profit interests involved here,” notes Read. “With nonprofits, it’s not so much about the volume of food produced as it is about engaging with the community and teaching business development skills and job training.”



PHOTO BY MELODY KO



The for-profit model is about scale and quantity of food produced and distributed. “Those models are equally important in this city,” he says. Both camps contribute to increased food access.

The legislation’s impact is felt citywide. “Before Article 89 ever came about...commercial agricultural ventures [were] not found in the zoning code,” explains Mercurio. Now, every last zone in the city allows farms of up to one acre. “That’s a huge change—from forbidden everywhere to allowed as a right everywhere,” notes Read. “That means no trips to the zoning board of appeal...that obstacle is now gone.” At this stage, the Mayor’s Office is trying to make the whole process more transparent. “I think we have removed a very significant barrier—the zoning barrier—but there are still other permitting challenges that have to be addressed,” says Read. “Anything we can do to streamline the permitting process will reduce the economic burden on farmers.”

Cooney shares the sentiment: “I would like to see better, faster access to city-owned lands—even as short-term leases. The Assets Department is still big-city slow.

Tax breaks for landowners leasing land for farming would accelerate access for non-city owned land. There is legislation at the state level that is being submitted. “

Beyond removing obstacles to permitting, the ordinance also creates opportunities for community-supported enterprises to fill professional, educational, and social roles. For example, jobs that didn’t exist two years ago exist now. “These are people who are educated in environmental science or horticulture, and they are becoming farm managers on small community farms,” explains Mercurio. “There are so many different kinds of jobs out there [in the field] of urban agriculture.”

BRA continues to have a finger on the pulse of Article 89. They work with new farms gearing up to take advantage of the legislation. “I’m still in love with this project,” says Mercurio, who helps people interpret the article and conducts Comprehensive Farm Reviews—a design review process that ensures the farm in question will be a good neighbor to abutting property owners. A farm’s layout, the activities it will support, the height of its structures, its signage, etc., are among the considerations. “We are looking at all of these



factors so hopefully they won't create any nuisances," says Mercurio. The city also mails letters to property owners within a 300-foot radius of a proposed farm so its development doesn't come as a surprise.

The inquiries fielded by BRA run the gamut. "It's not just the farms," notes Mercurio. People ask about permitting for things like growing micro greens, erecting a new shed, or building a hydroponic facility. "I help them determine the zoning for any type of urban agriculture activity they want to do."

The passing of the mayor's torch to Marty Walsh ensures Article 89's continued success. A strong proponent of local food production and the programs that support it, Mayor Walsh furthers the work initiated during Menino's time in office. It is clear the new administration values the ways in which Article 89 weaves urban agriculture into the fabric of the city and ties people together on multiple fronts. "This was something so many facets of a diverse community got behind," notes Read. "It was something that appealed to many groups on many levels—food access, food justice, and the 'cool factor'—everyone got excited about it." ●

Left page, far left: Glynn Lloyd is the founder and CEO of City Fresh Foods, City Growers, and the Urban Farming Institute. Left: Shawn and Connie Cooney started Cornstalk, a freight farming operation in the city of Boston.

This page, left: Boston Redevelopment Authority senior planner John (Tad) Read. Right: Kesiah Bascom at the Roxbury Food Project greenhouse.

Photos: Eric Roth

Sustainable SHOPPING

Shopping center developer, owner, and operator Regency becomes a pioneer in the United States' green bond movement.

BY JEFF HARDER

More than seven years ago, when Regency Centers first announced a new emphasis on sustainability at its hundreds of shopping centers around the country, the publically traded real estate investment trust became an industry sustainability leader. Last spring, after living up to its early promises to go green, the 52-year-old company proved that it could be a pioneer once again by becoming just the second institution in the United States to issue \$250 million in so-called green bonds, an investment vehicle that's helping carry out projects at Regency's Leadership in Energy and Environmental Design LEED-certified shopping centers. And along the way, Regency has proved something else: Its pledge to go green is as firm as ever.

Regency had been in the business of owning, operating, and developing grocery-store-anchored shopping centers—322 at last count—for nearly half a century when it commenced a series of sustainability initiatives

in November 2007. “We believe being environmentally and socially responsible is the right thing to do, and we're committed to that—which can be really strange for a development company, right?” says Lisa Palmer, Regency's executive vice president and chief financial officer. “But it's important especially because we're a development company. We impact the environment, growth in communities, traffic, whatever you look at.” At the same time, Palmer adds, the company's leadership believed investing in sustainability would produce returns in quality.

Across the country, Regency carried out large-scale sustainability measures with Mark Peternell, the company's vice president of sustainability, leading the charge. Between 2008 and 2010, Peternell says, Regency retrofitted more than 100 properties—approximately a third of its portfolio—with smart-irrigation controls to reduce landscaping water consumption. The company also swapped in LED lighting fixtures at more than 35 sites, along with energy management controls to remotely



The 40,000-square-foot Whole Foods store, located in the Regency LEED Silver shopping center, Market at Colonnade, in North Raleigh, met rigorous building and energy efficiency standards during construction and received the company's sixth LEED Gold certification in the United States.



Lisa Palmer, Regency's executive vice president and chief financial officer.

dim or turn off lights to balance a reduction in energy loads with safety and security on the premises. Regency Centers also partnered with the U.S. Green Building Council (USGBC) to establish criteria for LEED-certified shopping centers. Since 2009, about two-thirds of the company's developments and redevelopments—from Northgate Marketplace in Medford, Oregon, on one coast to the Market at Colonnade in Raleigh, North Carolina, on the other—have earned LEED certification. More recently, the company has begun calculating and reporting their properties' sustainability performance with tools like the Global Real Estate Sustainability Benchmark and Global Reporting Initiative.

Palmer says that Michael Mas, Regency's senior vice president of capital markets, pointed out green bonds—a financial product that harnesses proceeds to finance environmentally friendly investments and has been embraced among European investors in recent years—to company executives while they explored new ways to further their sustainability bona fides. “Mike knew this was a conversation we were having, and we thought, what better way to demonstrate our commitment to sustainability?” Palmer says. According to the *Wall Street Journal*, more than \$32 billion worth of green bonds were sold in 2014—almost three times the amount sold the previous year (www.wsj.com/articles/banks-launch-new-indexes-for-green-bonds-1415885411). But with few guarantees

from bond issuers that investor money is being devoted to undertakings that are truly green, persistent concerns and growth exist side by side.

That's why Regency's definition of eligible projects is such a linchpin of the green bonds program: All of the money is used to develop, redevelop, and upgrade projects that possess or are in pursuit of LEED certification. By lending LEED's third-party credibility to the program, it gives bond buyers peace of mind regarding how their money is being used. “Investors want to see verifiable evidence,” Peternell says. “That's why LEED was so critical!”

In May 2014, after ironing out the details, Regency Centers issued \$250 million worth of 10-year green bonds with a 3.75 percent interest rate, becoming the first nonfinancial corporate entity—and the second overall, after Bank of America—to offer the product in the United States. Bond buyers included a mix of conventional and sustainability-minded backers, and Peternell says that of the socially responsible investors (SRIs) that Regency approached, 80 percent participated in the bond offering. Later that summer, Regency announced that two properties targeted for funding from the green bonds program had received LEED designations. The first was East Washington Place, north of San Francisco Bay in Petaluma, California. The other was Grand Ridge Plaza, built as part of the Issaquah Highlands master-planned community outside of Seattle in Issaquah, Washington.

Grand Ridge Plaza looks a lot different than the bland boxes beckoning a sea of cars that might come to mind when you think of the phrase “suburban shopping center.” Instead, the 35-store, 14-restaurant location is a walkable village, mixing plazas, street landscaping, and a network of wide walkways that welcome stroller-pushing families and cyclists funneling in from adjacent bike routes, while substituting supersized lots with diffused street parking. The grounds, punctuated by a Safeway grocery store, take advantage of smart-irrigation controls, energy-efficient lighting, recycled and locally sourced materials, and materials to maximize energy efficiency. Of the 320,000 square feet on the site, says Craig Ramey, Regency's senior vice president and senior market office for the Northwest, roughly 168,000 feet earned LEED Silver certification last June.

As part of the transparency built into the program, Regency provides investors with annual reports—the first is



Grand Ridge Plaza's LEED Silver certification was awarded based on three major areas of reducing natural resource consumption—energy efficiency, water conservation, and waste reduction.

due in May 2015—detailing how the funds have been applied at Grand Ridge Plaza and other LEED-certified centers under Regency's purview. In the future, the green bonds could fund even more new developments and green projects at existing LEED properties. "Completing LEED-certified projects isn't a new part of our strategy," Peternell says. "But now, it's a commitment that has a little more teeth because we have to fulfill our obligation to our investors."

Behind the green bonds program as well as Regency's broader push for greater sustainability, there's a critical mass: Sustainable shopping centers like Grand Ridge Plaza reflect the expectations of a new generation. Communities place increasing importance on energy-efficient, waste-conscious, pedestrian-friendly retail. And when a shopping center goes above and beyond, it stops being a collection of stores, shelves, and sale displays, and it merges with the community itself. "It becomes a place where you can meet your neighbors, see your friends, and stay a while if you'd like to," Ramey says. "It becomes more than just a place to go buy a six-pack of Diet Coke." ●



**Mark Peternell,
Regency's vice
president of
sustainability.**



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CLEAN



POWER



PHOTO OF INTEL'S FACILITY IN CHANDLER, ARIZONA: FAWN DEVINEY

Recent American history is littered with the skeletons of shuttered manufacturing plants. But two production giants, Intel and Procter & Gamble, are doubling down on domestic manufacturing with investments in sustainable facilities and operations.

WRITTEN BY **CALVIN HENNICK**

Intel and Procter & Gamble want to be in business for a long, long time. Officials at both companies know that means they'll need to incorporate sustainable practices at a fundamental level, preparing for a time when manufacturers will no longer be able to rely on the nonrenewable resources that fueled industry during the last century.

But they also know something else: In order to be in business decades into the future, they need to keep making money today.

"Because of our size and the extent of our company, sustainability is something that's very important to us, both for our current business, and to ensure that we grow sustainably into the future," says Len Sauers, vice president of sustainability for Procter & Gamble. But, he adds, "Sustainability has to stand up from an economic standpoint, similar to any other thing we do as a corporation. We're not going to accept any tradeoffs, either in cost or performance, as we go down this sustainable path."

"We don't just [adopt sustainable practices] because it's the right thing to do and it feels good and it saves the planet," says Linda Qian, Intel's communications manager for corporate social responsibility. "A lot of

times [managers] talk about it in 'lean' terms. They might not even think about it as sustainability. It is absolutely critical to our business success. If we weren't able to continuously improve and reduce our resource use, that would be a business cost."

Forward-thinking companies like Intel and Procter & Gamble have been paying close attention to sustainability for years, but the combination of new technologies, lowering price points, and creative thinking are helping them to continue to fine-tune their operations. At the same time, more manufacturers are starting to realize that going green doesn't just mean saving the environment, but also saving money.

"When companies are sustainable, they're lean, they're tight, they're productive," says Kate Bachman, content editor for the Sustainable Manufacturer Network. "And they can compete more readily in the global marketplace."

The State of Domestic Manufacturing

The reports of the death of American industry, it turns out, were greatly exaggerated.

Things looked bleak during the Great Recession. In the run-up to the 2008 presidential election,



At Intel's manufacturing facilities, gray water from reverse-osmosis systems is reclaimed for landscaping irrigation and toilets, increasing total cycles of on-site water reuse. Photo: George Tenney



there seemed to be wide agreement that the U.S. had moved beyond an industrial economy and that lost manufacturing jobs weren't "coming back." Any turnaround, many argued, would be spurred by service- and knowledge-based jobs, rather than the manufacturing jobs that had long been the foundation for the very existence of America's middle class.

In fact, though, many of those manufacturing jobs have come back. Between 2005 and 2010, the number of U.S. manufacturing jobs dropped from 14.3 million to 11.5 million. But since then, the number has bounced back up to 12.3 million. That's still not what it was a decade ago, but it's a number that has crept up steadily for the last five years—a far cry from the continued hemorrhaging that some feared.

It's difficult to overstate the importance of these jobs to places like Albany, Georgia (where Procter & Gamble has a manufacturing plant and distribution center), and Chandler, Arizona (where Intel has manufacturing and other facilities).

"Intel definitely led the way in Chandler," says Micah Miranda, economic development director for the city, where Intel is the top employer. The city has a population of around 250,000—almost 10 times what it was in 1980—and Miranda says Intel is responsible for much of that growth. "They are a magnet, not only for

the companies that do business with them, but other companies who are looking for a similar workforce."

Albany, where Procter & Gamble is the fourth-largest employer, knows the pain that accompanies a factory shutdown, having experienced several in recent decades. "That is a huge loss," says Dorothy Hubbard, mayor of the 77,000-resident city. "People come to Albany to do things—to work, to shop, to eat out. When things happen to Albany, that affects the entire Southwest Georgia area." Hubbard adds that Procter & Gamble is "a good corporate citizen, in addition to providing jobs."

"The employees are part of our community," Hubbard says. "Many of them serve on boards. They work with nonprofits." The company also contributes heavily to the local United Way campaign.

"When you think about manufacturing, it's a wealth-building job," says Vince Falcione, external relations manager for the Albany plant. "It's not taking money from this community and just re-disbursing it. The money is getting spent here. For every Procter & Gamble job, there's another three or four jobs that are created to support the plant."

Intel and Procter & Gamble make very different types of products, of course, and therefore have different reasons for keeping a strong U.S.



Far left: Dorothy Hubbard, Mayor of Albany, Georgia, outside the P&G facility.
Middle: Vince Falcione, external relations manager for Procter & Gamble's Albany plant.
Photos: Chris Hamilton
Left: Len Sauers is vice president of sustainability for Procter & Gamble.

manufacturing presence. Intel makes high-tech chips that power people's smartphones, laptops, and computers, and the company relies on America's highly trained technical workers to produce them. Although Intel sells about three-quarters of its products outside the U.S., the company does three-quarters of its manufacturing here.

By contrast, Procter & Gamble makes household products so familiar that they blend into the background in the lives of many consumers, who place Tide, Charmin, Pantene, and Scope in their shopping carts almost unconsciously. It doesn't make economic sense to ship these products, many of which are heavy or bulky, across the world, and so the company generally produces them near the markets where they're going to be sold.

Reducing shipping is an environmentally friendly measure, obviously, but it's one that companies have enacted for cost reasons since the dawn of the Industrial Revolution. Today, says Bachman, other sustainable processes are similarly helping companies to keep costs down—and, possibly, to keep from moving jobs overseas. "Manufacturers that incorporate sustainability are more cost-competitive," she says. "They can enter a market despite the fact that their labor costs are higher."

Money Matters

In highlighting their sustainability efforts, companies typically emphasize their commitment to "doing the right thing." They're no doubt sincere in this desire, but the fact is, right and wrong can't be a company's only considerations when weighing business decisions. If new sustainability features are so costly that they turn a profitable business into an unprofitable one, that business won't be around for long, and any environmental benefit of the changes will quickly be lost when competitors swoop in and reinstate previous practices.

The changes that are truly sustainable are the ones that also provide a company with a competitive edge—either in cost or quality—because those are the changes that other companies will race to implement, as well. While industries have at times resisted various environmental regulations out of fear that the restrictions would increase their costs, no business leader has ever lobbied against measures that save them money.

Landfill diversion is a prime example of an effort that has both environmental and bottom-line benefits. Intel has begun selling its ammonia-based waste, which it had been paying to recycle, to businesses that can use it as an ingredient in fertilizer—saving the company



Taimur Burki, Intel's global green building program manager.

Photo: Fawn DeViney

several million dollars a year. The company has a goal of recycling 90 percent of its solid waste by 2020. "If you can avoid landfills, oftentimes you can save money," says Taimur Burki, Intel's global green building program manager. "You might even make some in your recycling. You have a very large positive return on investment."

Procter & Gamble's huge and diverse product line provides ample opportunity for the company to get creative about repurposing its waste materials. A waste product from the Metamucil manufacturing process is used for soil retention in landscaping projects; scrap materials from a feminine care plant in Budapest are shredded and sold to a cement maker, which burns the material in its kilns; the company donates scraps and defective materials from brands like Swiffer, Pampers, and Bounty to a nonprofit that employs brain-injury survivors, who turn the materials into industrial spill pads; and not-to-specification laundry detergent, which was once sent to landfills, is now sold to carwashes.

"We get revenue from that, and then we're also not paying the landfill fee," says Sauers. "Whatever we do has to be local," he notes. "If you start shipping your waste, you start losing the environmental sustainability aspect of it."

Consumers are also starting to demand that companies engage in sustainable practices, says Bachman. "They get cleaner products that don't make them sick,

that don't cause them problems, that maintain clean water and breathable air." Also, she says, large companies like Intel and Procter & Gamble are increasingly demanding that their suppliers follow sustainable practices—creating a powerful financial incentive for those smaller companies to green their operations.

"I'd say it's really picked up speed in the last five years," Bachman says. "And the expectations are getting firmer. Instead of saying, 'We want you to be more sustainable,' people are saying, 'We want you to achieve a 20 percent reduction in your energy consumption.'"

Clean manufacturing

The term almost sounds like an oxymoron. The word *industrial* conjures greasy overalls, polluted air, and the smell of petroleum products, rather than solar tubes and wind turbines.

While it's true that manufacturing facilities are large users of energy, that also means they present great opportunity for reductions, as well as the use of renewable energy.

Intel, says Burki, has long prioritized sustainability in its facilities, but only began perusing LEED certification several years ago when he saw that another tech company had received the designation at one of its facilities. "I said, 'Wait a second, we've been doing this all along,'" Burki recalls.



Emissions abatement systems and cooling towers benefit from recycled water with improved efficiency, lower operating costs and cleaner air emissions. Photo: George Tenney



He started by registering the company's Ocotillo campus in Chandler, which features a large solar installation and a high recycling rate, and also uses nonpotable water for irrigation and in its cooling tower. In 2011, 12 of the campus's 14 buildings qualified for LEED Silver designation or higher. "I did not invest any capital," Burki says. "I just wanted to see, as it stands today, how's it doing?"

Today, Intel has 12.5 million square feet of LEED-certified space globally, and is constantly striving to improve the performance of its facilities. Currently, Burki is exploring ways to reduce energy consumption in the company's kitchens. "I was walking by one day and just looked up at the exhaust and said, 'I wonder how the kitchens are,'" he explains. "I'm very inquisitive. Annoying, some might call me."

Like commercial office buildings, manufacturing facilities can improve their energy performance by upgrading lighting, heating and cooling, and other systems. But they also use an enormous amount of

energy to run their manufacturing tools, and Intel has begun to take a hard look at how the efficiency of these tools can be improved, as well.

"We've thought about energy conservation in tools [in the past], but it's never been our biggest priority [until recently]," says Gopi Krishnan, an Intel systems engineer. "We're held accountable for yield and capability and stability. But we haven't done a full-fledged optimization based on energy consumption or resource consumption. Now that every factory is looking to reduce costs, this is definitely an opportunity."

Using connected sensors, Intel has determined that it can save several hundred thousand dollars a year by optimizing the performance of a specific type of batch oven used in its manufacturing plants, Krishnan says. "We identified a real opportunity without impacting yield or quality. Now we're looking at other tools."

Procter & Gamble has 11 LEED-certified facilities, including six manufacturing plants, and around half



Left page: Gopi Krishnan is an Intel systems engineer. This page: Linda Qian is Intel's communications manager for corporate social responsibility. Photos: Fawn DeViney

of the company's manufacturing facilities send zero waste to landfills. The company has a long-term goal of powering its manufacturing facilities with 100 percent renewable energy; so far, that number sits at just 8 percent, but that will nearly double to 15 percent after the construction of a new energy facility at Procter & Gamble's Albany site.

The Albany site already has a biomass boiler that produces some of the steam needed for the making of Bounty and Charmin products. That boiler will soon be decommissioned, and the company has partnered with Baltimore-based Constellation to build a larger \$200 million biomass power plant on Procter & Gamble's property. Constellation will own and operate the facility, which will provide all of Procter & Gamble's steam, and will also produce electricity to be sold to the local utility company.

The biomass facility burns thousands of tons of chips made from woody pulp each year. Georgia has a large logging industry, and the pulp will come from

discarded treetops, bark, and branches, along with landscaping and crop waste.

"There's a huge cost difference," with biomass fuel costing much less to obtain and burn than natural gas, says Mats Bergquist, principal program manager at Constellation. However, he adds, the upfront capital cost for a biomass facility is much higher, and it can be difficult to find reliable long-term supplies of the biomass material. "But," he says, "the fuel savings are so substantial that, under the right circumstances, you can reap the benefits."

Involving Employees

Most workers will never feed wood chips into a biomass boiler or test the energy efficiency of manufacturing tools, but companies can find other ways to invest their employees in corporate conservation efforts. Workers at Procter & Gamble's Albany plant participate in community cleanup and recycling days, and Falcione says that a sustainable ethic pervades the plant. "If you



leave your office, we're expecting you to shut your lights off," he says. "Or, if I leave my lights on when I leave, you feel free to shut them off."

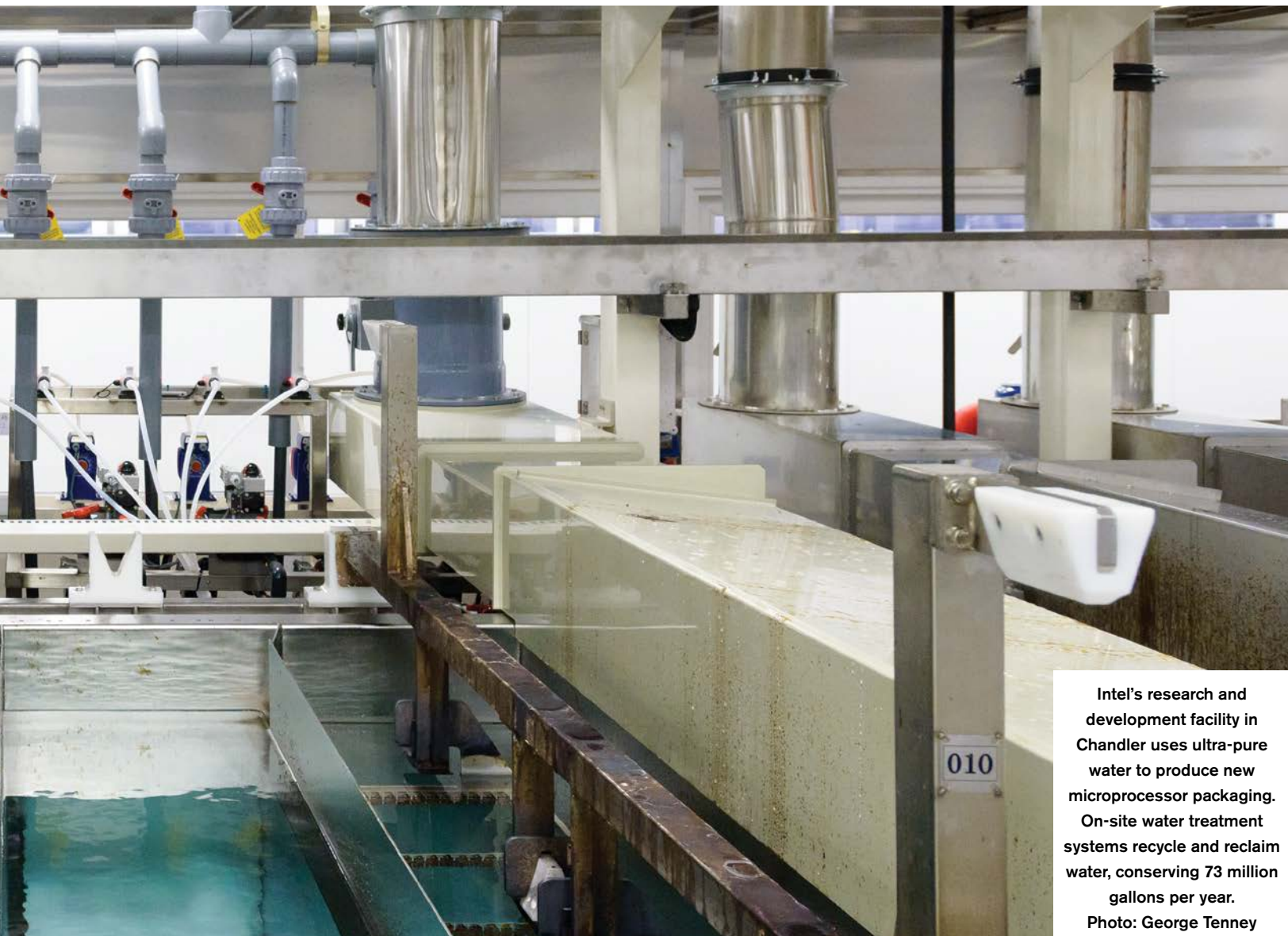
At Intel, employees can feel the impact of their company's sustainability efforts in their wallets. Bonuses for every worker in the company are tied to a number of different goals, including one each year focused on corporate social responsibility, such as increasing recycling or reducing energy consumption. "It's a small portion of the total bonus," says Qian. "But it's there, and it's highly visible, and employees see it."

Krishnan coordinates a speaker series focused on sustainability at Intel, drawing an average of 140 attendees for the monthly lunch talks. Employees have begun using the series' 2,800-person email distribution list to connect with one another to launch sustainable initiatives of their own, Krishnan says.

"If people have ideas, but they don't know how to execute them, we've used the speaker series to bring them together with others."

Intel supports and recognizes these employee-driven efforts through grant and award programs. The company has funded employee projects ranging from a bike share program to a honeybee farm to wetlands conservation. Awards winners include a pair of employees who reconfigured the energy flows in a central utility building in a way that reduced carbon dioxide emissions by 27,000 tons per year, as well as a team that found a way for the company to recover tantalum, an element used to manufacture a number of Intel's products.

"It reduced the amount of tantalum that we have to purchase, which is a cost savings for us," Qian says. "Not only is it relatively expensive, but it's a conflict mineral, which has been a huge issue for our industry."



Intel's research and development facility in Chandler uses ultra-pure water to produce new microprocessor packaging. On-site water treatment systems recycle and reclaim water, conserving 73 million gallons per year. Photo: George Tenney

Sustainability Driving Development

Investments in sustainable manufacturing can lead to additional development in the communities where companies are located—another counterpoint to the idea that what's good for the planet is bad for business.

In Chandler, for example, Intel paid for a portion of the cost to expand a wastewater treatment facility. The company needed the additional capacity to accommodate its own growth plans, but the larger facility also allows the city to send out more treated water for things like irrigation.

"That saves our potable water," says Doug Toy, water regulatory affairs manager for the city. "We're all benefitting. When they reuse the water, we don't have to go out and secure additional rights for more water."

"Intel's investment in reclaiming and reusing water was critical for our economic development," says Miranda, the economic development director. "It

allows us to recruit other industries. We have a finite level of water that can be delivered. So if we can capture and reuse that water, we're able to allow new businesses to come in and thrive."

In Albany, the new biomass facility is expected to create up to 500 new jobs during the two-year construction process, with another 50 to 70 permanent local jobs for ongoing operations. Hubbard, the mayor, notes that the new \$200 million clean-energy facility is a strong sign that Procter & Gamble plans to keep manufacturing its products in Albany long into the future. "We are so happy," she says, unable to stifle her delighted laughter. "That's why we did everything we could to help them."

"We want to continue to make sure this plant is successful, and this boiler is going to help with that and help us take care of business," says Falcione. "We want to keep this relationship going for a long time." ❁



PHOTO: ERIC ROTH

Green Neighborhoods



The Affordable Green Neighborhoods Grant Program aids low-income housing projects in the pursuit of LEED certification.

WRITTEN BY **JEFF HARDER AND ERIC BUTTERMAN**



From the looks of things today, you'd never know the Homes at Old Colony are a world apart from what they used to be. First built in 1940, the Old Colony Housing Project in South Boston was one of the city's oldest developments. But by the turn of the 21st century, it had become one of the costliest places under the Boston Housing Authority's jurisdiction, with rundown infrastructure, high energy consumption, and a litany of health and safety hazards for its tenants—not to mention the site design itself. "It was a classic superblock setup," says Shiva Prakash of New Ecology, the Boston-based nonprofit that served as sustainability consultants on the site's redevelopment. "There wasn't much connectivity to the site, and residents were siloed off in their own buildings."

But six years after the demolition of its distressed predecessor and mere months after earning Leadership in Energy and Environmental Design for Neighborhood Development (LEED ND) Stage 2 Gold certification, the Homes at Old Colony are a breath of fresh air near the South Boston waterfront. A cohesive site design places townhouses in the center and taller buildings at its periphery. Streets that once

stopped at Old Colony's outskirts now extend into a pedestrian-friendly grid, linking the development with surroundings that include an elementary school and access to the transit authority's subway and buses. Its 285 units are still deeply affordable public housing, Prakash says, "but it doesn't feel institutional at all. It feels like home."

The Affordable Green Neighborhoods (AGN) Grant Program was a vital part of Old Colony's transformation. Developed by the U. S. Green Building Council (USGBC) and the Bank of America Charitable Foundation, the program has helped 31 affordable housing projects around the country pursue LEED ND certification since 2010, resulting in 298 acres, 5,667 dwelling units, and 8.3 million square feet of buildings meeting the rating system's criteria—with many more to come. "By providing money, enhanced education, and an open communication channel with our staff, our hope is that we can help get developers over the hump, get their first project under their belt, and be able to take that knowledge forward to use in the rest of their work," says Casey Studhalter, LEED ND project manager for USGBC.



Previous spread, left page: Shiva Prakash at the Old Colony Housing project in South Boston. Right page: Beacon playground.

Left: The landscaping and accompanying irrigation system around the buildings and the Joseph M. Tierney Learning Center was designed to require very little watering and maintenance.

The advancement of LEED ND's holistic, community-minded approach is at the heart of the Affordable Green Neighborhoods Grant Program. Besides urging improvements in energy efficiency, indoor air quality, and other green design criteria into buildings and surrounding infrastructure, LEED ND seeks to make neighborhoods more livable. That means mitigating environmental impacts through sensitive project siting; reducing vehicle travel by creating pedestrian-friendly terrain and by placing jobs, schools, retail locations, and other services within walking distance; and promoting smart growth of communities through careful, concentrated design that resists sprawl.

It's an approach that naturally fits affordable housing developments. According to the National Low Income Housing Coalition, more than 6.5 million low-income families spend more than half of their incomes on the cost of housing and utilities. Great distances can separate affordable homes from gainful employment, bringing strain on families and their lifestyles. "[Through LEED ND], there's a chance to see all the benefits from holistic green

neighborhoods, and the benefit to these families who are economically challenged can have a huge effects for years to come," Studhalter says. "This can be the tip of the iceberg." But even though LEED ND principles yield great results, obstacles to implementation remain: certification can be costly, and many developers of affordable housing simply don't have the experience, knowledge, or resources to navigate the process.

In response, USGBC and the Bank of America Charitable Foundation launched the Affordable Green Neighborhoods Grant Program to give selected nonprofits and public agencies the tools to ensure their projects earn LEED ND designations. Along with \$31,000 to cover certification expenses, the grant includes registration for workshops as well as LEED Green Associate and Accredited Professional exams, access to USGBC staff for technical assistance, and other educational resources.

Bank of America has a long-standing relationship with USGBC and plenty of common philosophical ground. (One hundred of its financial centers have achieved LEED certification, for example.) Community



Most of the townhouses have photovoltaic panels that provide electricity to the site.

development has been a focus of the Bank of America Charitable Foundation—the bank’s philanthropic arm—and the AGN Grant Program grew out of the shared concern between the two organizations, says Richard Brown, senior vice president of corporate social responsibility for Bank of America. “Local residents and community leaders know what is needed to meet local affordable housing needs,” Brown says. “What they may need help on is making those projects optimally energy efficient and harnessing neighborhood-scale sustainability that gives equal emphasis to economics and equity. That’s where USGBC can help and why the assistance made available through the Affordable Green Neighborhoods is so important.”

So far, 31 projects have received AGN grants: 10 in 2010 and 2012, and 11 in 2014. To see a glimpse of the program’s genuine success, the transformation at the Homes at Old Colony is a good place to start.

In 2009, once demolition crews erased Old Colony’s past incarnation, developers Beacon Communities, in partnership with the Boston Housing Authority, aimed to redevelop the entire context of the site. With a blank canvas, Prakash says, LEED ND criteria helped craft a holistic vision for the siting and connectivity of the neighborhood. But when New Ecology discovered the Affordable Green Neighborhoods Grant Program and joined its first round of recipients, those LEED ND criteria became more than sources of inspiration. “If there were moments when it would have been easier to do something a different way, there was an understanding that those principles were now set in stone,” Prakash says.

The AGN grant proved especially valuable because the team behind the Homes at Old Colony was entering uncharted territory: it was the first LEED ND project for Beacon Communities as well as New Ecology. “We didn’t have a lot of institutional knowledge about how to go about the process,” Prakash says. “The AGN program provided not only the raw funding for certification, but a lot of technical and peer support as well.” Project teams collaborated during monthly conference calls, sharing ideas with one another and finding solutions to issues that popped up during the certification process. And if there were uncertainties in whether any feature of Old Colony’s redevelopment

would meet credit guidelines, Prakash says, USGBC staffers were a phone call or an email away. "I could just email Casey [Studhalter] and say, 'This is exactly what we're doing. Do you think this meets the credit requirements?' I never had a panicked moment."

With the second phase of construction completed in spring 2014 and the project expected to wrap up in 2015, the Homes at Old Colony earned LEED ND Stage 2 Gold certification. Solar panels line the roofs of the development's buildings, each of which—from the townhouse-style residences to the Joseph M. Tierney Learning Center—has its own LEED designation. It remains deeply affordable, and Prakash said that a concerted effort to get Old Colony's former residents into the renovated space means many of them returned, heaping praise on an upgraded environment that fosters community. Without the AGN grant, Prakash says, the Homes at Old Colony would have never come this far. "The grant was absolutely critical in terms of the actual certification. There was no way that the Old Colony site would have been able to go through the formal LEED ND process without it."

Elsewhere in Boston, David Queueley, Eco-Innovation Fellow at Codman Square Neighborhood Development Corporation (CSNDC), says his organization needed the grant to enhance Dorchester's Talbot Norfolk Eco-Innovation District (TNT EID), a 46-acre, 13-block area comprising 252 homes, a mix of triple-decker, multi-unit, as well as one- and two-family dwellings. With plans to develop at least 175,000 square feet of mixed-use space, Queueley says the district primarily houses low-income residents, and that CSNDC also intends to provide home ownership opportunities in the form of affordable, close to net-zero condominiums, known as the New England Heritage Homes (NEHH). The NEHH vision was created with residents present every step of the way, from architect selection to design review. "We already know that we can get a good amount of LEED ND points for things I'm proud to say we've already accomplished—smart location and linkage, neighborhood pattern and design, and walkability were just a few," he says. "It was a thrill to get the grant, confirming our feeling that we're heading in the right direction."

After receiving their grant in 2014, CSNDC and the residents of the TNT EID joined a community whose



Dave Queueley, Mark Dinaburg, and Jirair Ostayan outside Codman Square Neighborhood Development Corp. Photo: Eric Roth



In Philadelphia 53 of a 120 apartments that make up the 2010 grant recipient Paseo Verde are set aside as low-income housing.



IMAGE COURTESY OF WRT / © HALKIN MASON PHOTOGRAPHY

“Low-income communities should have the same things any others do: green spaces, trees, and walkability.” –ROSE GRAY

members are all looking to help each other learn and succeed. “There are projects throughout the country going through what we are, and we can all benefit from each other’s experience,” Queeley says. And besides giving the Talbot Norfolk Eco-Innovation District an all-around healthier design, he says the LEED ND designation demonstrates an investment in the future to the neighborhood’s residents. “We need to have equity goals so the residents have a stronger stake in what happens,” he says. “I always say, ‘Why not here? Why not us?’ I know we can reach our goals and this grant helps move that conversation and that process forward, and keeps them front and center in everyone’s minds.”

In Charlotte, North Carolina, David Howard, senior vice president of strategic initiatives and fund development for the Housing Partnership, was involved in the effort to make Brightwalk at Historic Double Oaks more sustainable. Originally a World War II-era housing project, the community has undergone a remarkable transformation with 50 of its 98 acres pursuing a LEED ND designation. “We had 573 apartments going bad, so we bought them, tore them down, and we intended to make them sustainable,” Howard explains. “We took brick, concrete, and asphalt on the street and found a way to reuse it. There are 216 affordable apartments on the property and 120 single-family houses—we’re proud to say that it’s now one of the hottest-selling neighborhoods in the city.”

After receiving an Affordable Green Neighborhoods grant in 2012, Howard and his colleagues took advantage of all of the available resources. They got an up-close look at the nuances of LEED ND certification at Greenbuild, while the USGBC’s insights helped them further immerse themselves in the fundamentals of sustainable communities. “From all the education, we started to really learn just how big the sustainability community was,” Howard says. “This is a country realizing where our world and industry is going—it’s going towards a greater understanding of the environment.” In the future, he looks forward to learning even more from the USGBC team. “We need sustainability to improve lives and for greater credibility—I’m confident in what this grant will help us achieve.”

And in Philadelphia, 53 of the 120 apartments that make up 2010 grant recipient project Paseo Verde are set aside for low-income occupants, says Rose Gray, senior vice president of community and economic development for Asociación Puertorriqueños en Marcha, who served alongside architect and landscape architect, WRT and Jonathan Rose Companies as project co-developers. But she adds that the community—located near Temple University, a nearby health clinic, and social services offices—provides the same amenities to every tenant. “You can go out in the garden area, use the fitness center and community room—we even have stairways that play music to encourage exercise,” she says. “It’s 100-percent occupied in both affordable and market. Low-income communities should have the same things any others do: green spaces, trees, and walkability.” Looking back after achieving LEED ND Platinum status for the project, Gray says her organization found the grant’s resources particularly helpful in training. “It really helped lead us through all three phases of the LEED ND process,” Gray says. “I don’t think of this as a one-time thing, but as each of us learning lessons that will continue to lead us forward.”

These successes are poised to continue. Thanks to the continued support of the Bank of America Charitable Foundation, funds allocated for the program grew by 28 percent for the 2014 round. This newly expanded program allows five projects in the most recent round of grant recipients a two-day, on-site visit from USGBC staffers to answer questions, give advice, and help bring projects from conception to fruition.

By continuing to advance LEED ND-certified affordable housing projects, the Affordable Green Neighborhoods Grant Program helps counter some of the nagging myths about sustainably designed communities. “It really ensures that the concepts of sustainability aren’t limited to high-end developments. It’s unfortunate that green building often gets an unfair characterization that it’s only for the top one percent, and that not everyone benefits. This shows that sustainability can be made available for all,” says Gray. And once developers have finished their first LEED ND-certified community, chances are it won’t be their last. 🌿

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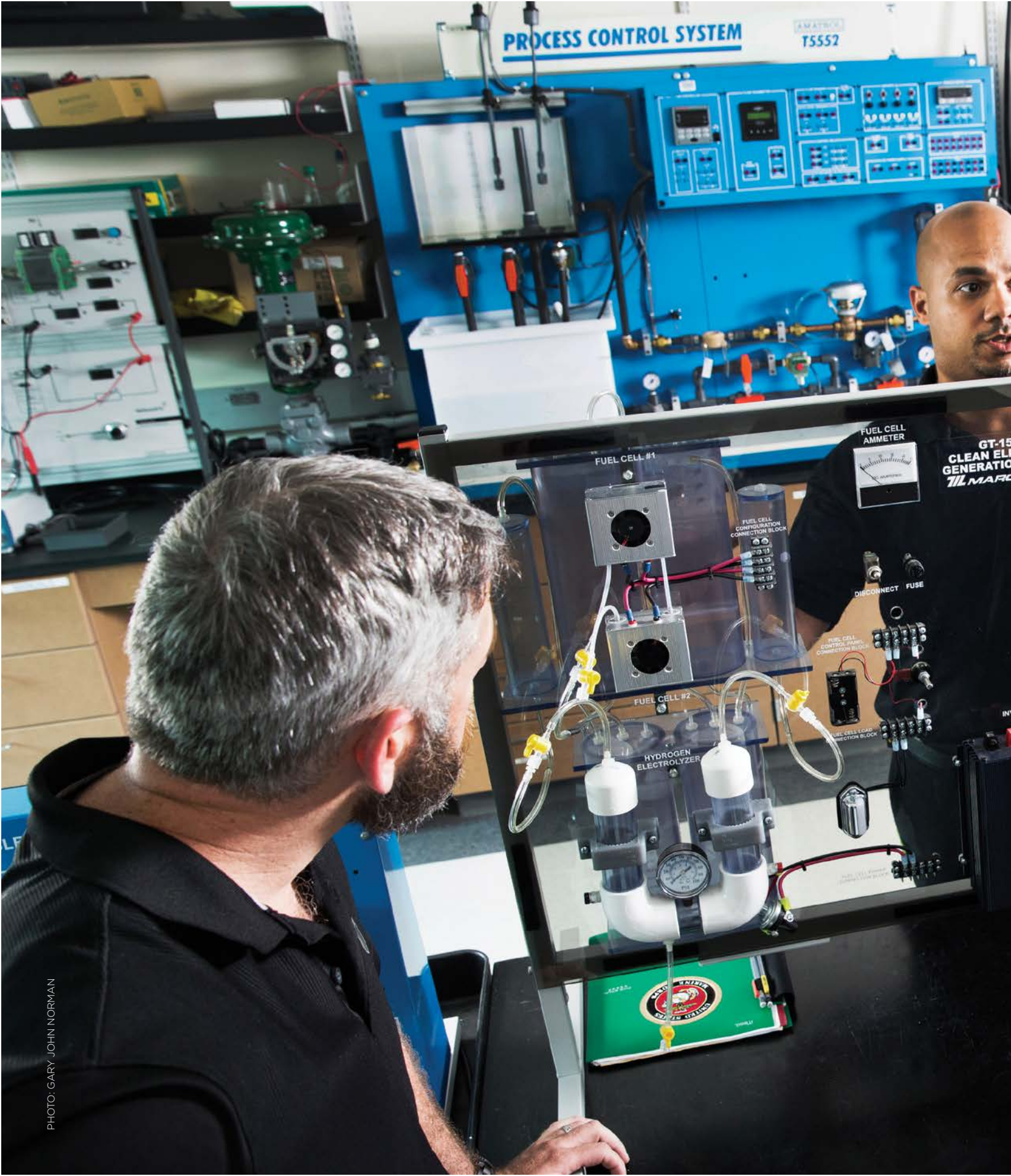


PHOTO: GARY JOHN NORMAN



WYING FOR VETS

Veterans for sustainability, an idea generated in Fort Lauderdale, Florida, is taking shape and moving across the country.

WRITTEN BY **KILEY JACQUES**

We are hoping to be both the model and the catalyst," says Brian Sales of the U.S. Green Building Council's (USGBC) Green Veterans Group. As one of the group's two founders, Sales speaks emphatically about the program that helped him reintegrate into civilian society after 10 years in the U.S. Army Infantry.

Partly a response to challenges faced by veterans post service, the Green Veterans Group's genesis can be traced back to a brainstorming session between Sales and co-founder Jonathan Burgess. The two met in 2013 while attending the Florida Caribbean Regional Leadership Summit. "We started talking about the things USGBC does as a whole," recalls Sales. "And I am very passionate about veterans and veterans' issues, especially reintegration and employment." As a civilian and long-serving USGBC volunteer, Burgess's own mission has been to connect veterans with opportunities in the green industry. Though from different backgrounds, the pair bonded over the idea that USGBC could be a vehicle for providing direction, connection, and purpose for returning veterans.

Barely a year later, the idea has taken flight. Sales himself serves as an example of the program's success. Deployed three times—once to Kosovo and twice for combat tours in Iraq—he returned home to look for a new career path. "As a veteran, it's really hard to reintegrate back into the civilian sector," he explains. "Having a job is critical." During

his time in the army, Sales—like many veterans—grew accustomed to structure, discipline, and clear expectations. "All of a sudden, you get out and you are disenfranchised." Without the army's regimental rules, Sales felt directionless. "Add the complication of post-traumatic stress disorder, whose symptoms become more pronounced when you enter civilian life...and now you are all alone." His course of action was to enter a college program for alternative and renewable energy management, which, ultimately, is what connected him to USGBC.

Air Force veteran Edel Travieso experienced those same feelings and sought refuge in the Green Veterans Group. "Being so fresh out of the military and getting back into a group of like-minded individuals with the same passion and drive as I have—that was a learning experience in and of itself," says Travieso, who ultimately served as advocacy chair for the program. "To be taken in by that group and to be part of something bigger than me...it was an opportunity to do something great."

A teenage father at 17, Travieso turned to the Air Force for guidance. At the time, he felt, school wasn't an option. "Although I very much wanted to go to college, my life took a different course," he says. "However, as it turned out, it was the best decision I ever made. I like to think that things always happen for a reason." He views his six years in service as a time of growth, during which he learned leadership skills and found "purpose, motivation, and direction."



Previous spread: Ediel Travieso educates fellow Green Veterans on how wind and solar energy is converted for use inside a home at Palm Beach State College energy lab. This page: USGBC's Green Veterans group founder Brian Sales and veteran Ediel Travieso. Photo: Gary John Norman



Brian Sales and Edel Travieso perform a roof and exterior inspection as part of the energy audit. Photo: Gary John Norman

**Jonathan Burgess is
the co-founder of the
Green Veteran's Group.**

Eventually, it also afforded him an opportunity to earn a college degree. "I was [able to] get money for school after my enlistment through the GI Bill while taking care of my family," explains Travieso.

Travieso joined the Green Veterans program on meeting Sales—the two were classmates at Everglades University and shared an interest in alternative and renewable energy management. "I quickly realized it was something that could be potentially huge, bigger than me or anybody in the group," says Travieso.

Meanwhile, Burgess, who has many relatives who have served, heeded another kind of call to action. "I always felt a need, growing up, to do more than just say, 'Thank you for your service.'" Equipped with leadership skills, accustomed to regulations, and respectful of procedures, Burgess viewed veterans as a promising pool of employees for the green industry. "While Brian was fighting for our country, I was slowly serving in various roles within the USGBC," notes Burgess. "Once the two of us connected, it seemed like I could be the civilian counterpart and collaborator to help bring veterans' issues to the surface within the context of the USGBC."

In time, it became clear that green building projects were a source of empowerment for veterans. So, in late 2013, the group started identifying some focus areas. In an effort to "create a green army to help our country be sustainable," they developed training courses—taught by USGBC Leadership in Energy and Environmental Design (LEED) faculty volunteers, Building Performance Institute (BPI) instructors, and institutional partners including two Florida community colleges. The Green Veterans Sustainability Training Program combines the curricula of LEED Green Associates and BPI to provide practical "green education" to veterans that will be valuable to prospective employers. "There are a lot of ways we can provide that initial education," notes Burgess.

Beyond the classroom lies on-the-job training. "We need to provide that transition into long-term job placement," says Burgess. With help from Solar Energy Loan Fund (SELF)—a local nonprofit agency that helps administer loans to pay for energy-saving



SELF Program

Solar and Energy Loan Fund (SELF) was founded in 2010 and focuses on community development projects in underserved areas in Florida, with an emphasis on home energy improvements. SELF provides energy expertise and affordable financing to help low to mid-income homeowners and small businesses identify and make cost-effective energy changes to their homes and businesses. The Veterans helping Veterans program through SELF allows for veterans to lend to other veterans through crowdsourcing or peer-to-peer lending. SELF is responsible for screening applicants and posting loan requests on the website KIVA, a nonprofit organization with a mission to connect people through lending to alleviate poverty. If the funding goal is reached within 30 days, KIVA will distribute funds to SELF to complete the client's home improvement goals and SELF will service the loan until maturity.

www.kiva.org/partners/395

home improvements—veterans complete an apprenticeship with a contractor. To create such opportunities, the Green Veterans Group collaborates with organizations like Rebuilding Together, United Way's Mission United, and Green Collar Vets ("a clearinghouse for green jobs"), among others. "We figured, with that program, veterans would automatically get jobs as energy auditors in the field while working on getting their LEED-accredited professional certification," notes Sales. "It's like a pipeline that we pretty much created."

Equipped with both training and industry experience, participants also collaborate with partner organizations on veteran-oriented community projects, or "boots-on-the-ground work." The goal of the partnership is twofold: First, the program enables veterans to have energy improvements and structural repairs made to their homes, and second, LEED-trained veterans complete the work. "It's about veterans helping veterans," explains Sales.

Like Sales, Travieso is a shining example of the Green Veterans Group's vitality. Since his initial involvement, he has been working on the programs he helped established, particularly the sustainability training program, the development of which had him talking to city officials, volunteer groups, and heads of universities. "It was both a personal and professional learning experience...and very rewarding and very educational."

Travieso's college degree, in conjunction with his involvement in the Green Veterans program, "gave legitimacy to my credentials." Upon graduating, he applied for a job with SELF and—with a recommendation from USGBC South Florida executive director Lee Cooke and one from Sales—he landed the position. Travieso now serves as a manager at SELF PACE Now in St. Lucie County, Florida. "I guess [Green Veterans] works because here I am in the green industry."

Another of the Group's efforts stems from a relatively new field of study: therapeutic building design for trauma resolution. Meant to address issues like post-traumatic stress disorder, the concept employs the WELL Building Standard—with its focus on air, water, nourishment, light, fitness, comfort,

**The Green Veterans team
and college faculty at Palm
Beach State University
Solar and Wind Lab.
Photo: Gary John Norman**

and mind—to enhance spaces for veterans. “We want to change the types of buildings veterans live, work, and play in,” explains Burgess. Following in the footsteps of LEED for Healthcare, evidence-based therapeutic build-and-design strategies aim to create places of respite. “It’s everything from security-based design to places for socialization and places for contemplation—with good acoustics and quality views,” notes Burgess. “It’s what we see as being the next wave of wellness...it’s what we’d like to see the Green Veterans program focus on.”

The hope is to see those design principles applied in American Legion halls, VFW posts, VA centers, and veteran housing. “There’s an opportunity to take a step back from just energy and water efficiency,” says Burgess, “...and look at some of these other subtle approaches to design.”

Given its success in South Florida, the Green Veterans Group is now expanding into other USGBC chapters. “It’s not going to take very long for these little grassroots camps to start making a real effort in communities across the country,” notes Burgess. In addition to being a model, the group is also a liaison between chapters; the program and startup tools they have created are replicable. According to Burgess, it’s a matter of connecting a veteran who has an interest in sustainability with a USGBC chapter. “It’s pretty easy to use the tools that we have developed to start a local movement in a variety of settings,” he says. In fact, Burgess predicts the program will be part of USGBC chapters nationwide in 5 to 10 years.

“There are a lot of veterans out there who need help,” says Sales. “I think we can be a part of the solution. Once veterans see a good program that has meaning and will help them with employment, they’ll jump right on it.”

Asked how he might advise former service members re-entering society, Travieso says he would tell them to talk to the people behind Green Veterans. “They will not only help you get a job, they also help integrate you into society and talk to you about all your troubles and all the challenges that come with getting out of the service and living in the world and trying to make it. I would tell them to engage and collaborate. I did it and it has worked out for me so far.” 🌿



Made in the City

How a new factory became a part of one of our oldest manufacturing towns.

By Nicolette Mueller

In February 2015, President Obama designated the Pullman Factory District, a neighborhood in Chicago's South Side, as the Windy City's first national park. Established in the 1880s as a manufacturing center and company town for the Pullman Palace Car Company, the neighborhood has a rich history in the labor rights and civil rights movements.

It's also home to the new manufacturing facility for Method, the company known for its products that are as "kind to the planet as they are tough on dirt." Designed by McDonough + Partners, the factory is

located on 22 acres of space in the heart of the Pullman neighborhood, and will likely soon become the first LEED Platinum manufacturing facility in the consumer packaged goods industry and one of only a dozen LEED-certified manufacturing facilities worldwide.

Like the luxury Pullman cars of the halcyon days of rail travel, this facility, too, is beautiful, complete with its onsite renewable energy from wind and solar, plans for the world's largest rooftop farm, dedicated acres for native plants and habitat, and the extraordinary energy and water efficiency that are hallmarks of LEED

Platinum projects. But maybe the best part of the story about Method's factory is about location, location, location. The impact on local jobs, the local economy, and bringing manufacturing back inside the city limits in a safe and sustainable way is the real success story behind Method's new space.

When Method asked commercial real estate services firm Cushman & Wakefield's Global Business Consulting group to find a site for its new factory, the team focused on how to leverage the power of business to create green jobs and opportunities in the heart of



RENDERING: MCDONOUGH + PARTNERS

Eric Ryan and Adam Lowry, founders of Method Products PBC.

the city. Method co-founder and Chief Greenskeeper, Adam Lowry, notes, “We wanted to build our manufacturing facility within a community that could benefit positively from its presence. The world is urbanizing rapidly, so cities in particular are in need of businesses that can help revitalize their economies and communities. Building a world-class sustainable manufacturing facility gave us the opportunity to demonstrate how business can contribute to urban revitalization, community building, and the world around us.”

The Method factory has brought nearly a hundred new manufacturing jobs to Chicago’s South Side and has a recruitment strategy to target the talent in the Pullman community. These are jobs that won’t require workers to commute by car outside the city, saving valuable time, money, and natural resources and lessening congestion on Chicago’s roads and freeways.

By helping Method site its factory in the city, Cushman & Wakefield’s contribution to the project has upped its sustainability ante. Not only does it sit on a restored brownfield site, but it also infuses a new vitality into an old urban community that can benefit greatly from the new green economy. The close connectivity to the community and to transportation will help bring raw materials to Method and transport finished products to stores across the country.*

The facility will help pave the way for the future of urban agriculture. A 75,000-square-foot (1.72 acres) rooftop greenhouse installation is designed to grow up to one million

pounds of fresh produce annually, which will be sold to local restaurants and be available to the surrounding community through produce markets. A 230 foot 600kW wind turbine produces about 30 percent of the factory’s energy, and three solar trees each with 60PV modules can supply 45.9 kW of energy. Solar thermal collectors provide hot water for hand washing and some factory processes. Stormwater from paved surfaces is captured in bioswales where it can filter back into the ground and the south wall of the factory is highly

transparent giving workers a strong visual connection to the outdoors while providing an abundance of daylight.

It’s more than a factory—it’s a blueprint for the future in bringing manufacturing back to the city. As Lowry says, “We hope our facility serves as a model for what manufacturing and urban renewal can look like in the 21st century.” ●

** To read more about bringing industry back into urban areas and incorporating LEED principles into site selection for industrial facilities, check out the white paper by Matthew Poreba from Cushman & Wakefield’s Global Business Consulting group on plus.usgbc.org.*



Will Work for Education

Starbucks takes the lead in social responsibility at home with a college program for its workforce.

By Judith Nemes

Starbucks is often touted as one of the more enlightened corporations in the U.S. that's working hard at shrinking its carbon footprint and pursuing global social responsibility initiatives. Those goals are achieved through innovative green building programs, sustainable operating practices, and sourcing fair trade coffees to improve the lives of coffee growers (and their workers) around the world.

It should come as no surprise that Starbucks' leaders recently expanded

their efforts in social responsibility—only this time a lot closer to home. Last summer, the Seattle-based company established a college education program in a unique partnership with Arizona State University (ASU) that encourages its own employees to finish college. The carrot for that nudge to go back to school is tuition reimbursement so individuals who start out at Starbucks can aspire to even greater opportunities and achieve improvements in their quality of life. Starbucks estimates about

70 percent of its workforce are students or individuals who would like to go to college, and many of them would do so if they could find an affordable and manageable work/life balance to make that happen.

U.S.-based Starbucks employees who work 20 hours per week or more can sign up to earn a bachelor's degree in one of 40 undergraduate degree disciplines offered by ASU's prestigious online program, according to Starbucks. Degrees are awarded for majors



Kaede Clifford is the first graduate of the Starbucks College Achievement Plan.

that include education, engineering, business, psychology, communications, and retail management. The program is open to workers (called “partners” internally) at all company-owned stores nationwide, which includes its other affiliates: Teavana, La Boulange, Evolution Fresh, and Seattle’s Best Coffee. Employees at support centers and company plants also are eligible.

Employees who are already en route to acquiring a bachelor’s degree and enroll as juniors or seniors will get full tuition reimbursement from Starbucks for every semester of fully completed courses, the company says. Freshmen and sophomores who enroll at ASU online through the program can receive partial tuition payback and need-based financial aid, according to Starbucks.

No strings attached

Perhaps most surprisingly, Starbucks employees who graduate aren’t obligated to continue working for the company once they’ve received their bachelor’s diploma. They can move on to pursue a career in their area of study or go after any opportunity that could improve their standard of living, notes Starbucks CEO and President Howard Schultz. He explains the motivation for initiating the College Achievement Plan, or CAP, was to encourage more individuals to finish college who couldn’t otherwise afford to do so.

“There’s no doubt, the inequality within the country has created a situation where many Americans are being left behind,” observes Schultz. “The question for all of us is, should we accept that, or should we try and do something about



Michael M. Crow, president of Arizona State University.

it. Supporting our partners’ (employees’) ambitions is the very best investment Starbucks can make.”

The CAP program, which launched officially last June, has been wildly popular. By spring semester 2015, which started in January (2015), about 1,500 Starbucks employees across the country had enrolled and nearly all 40 majors were represented among the degrees being pursued, says Carrie Lingselter, a spokesperson for ASU online. The most commonly selected degrees among the group include psychology, organizational leadership health sciences (healthy lifestyle coaching), mass communication and media studies, and English.

Shawn Walker, a barista for Starbucks in New York City, was a year away from completing his bachelor’s degree in graphic information technology, but quit a few years back because he couldn’t afford to repay mounting student loans. Now he’s back in school at ASU, working part-time and hoping to move on when he graduates.

“Now I see that it’s possible for me to move my life forward,” says Walker. “I am confident I will be successful doing

something I love and this opportunity is a new beginning for me.”

Abraham Cervantes, another Starbucks barista, is now studying music at ASU as part of the CAP program while he continues to work. “I want to teach at a university, and for that, you need a college degree,” he explains. “For me, the opportunity to earn my degree means I have the chance to teach others and make a better life for myself and my mom, who raised me and my three siblings on her own.”

Two-tiered reimbursement, extra support

The program has two levels of reimbursement. Starbucks is offering maximum incentive to individuals who are closer to completing their degrees, but also gives partial reimbursement to freshmen and sophomores as a motivator to get on the path to higher education. Students receive a small scholarship from Starbucks when they first enroll, which never has to be repaid. Participating employees pay upfront for the rest of their tuition and other fees, but then are reimbursed by Starbucks every time they complete 21

“The motivation for initiating the College Achievement Plan was to encourage more individuals to finish college who couldn’t otherwise afford to do so.”

—STARBUCKS CEO AND PRESIDENT HOWARD SCHULTZ



credits (the estimated equivalent of a full semester of classes).

While financial support is critical for employees who participate, Starbucks and the university assembled a support system of professionals to ensure students have a better chance of making it to the finish line. An enrollment coach will be assigned to each student, as well as a financial aid counselor and an academic advisor who makes sure they are taking the right courses and staying on track toward graduation.

In addition to the 40 existing majors available at ASU online, Starbucks and the university created a new Retail Management Degree that’s geared toward employees who are interested in expanding their skill set for a retail environment and staying with the company after acquiring their degree,

says Dayna Eberhardt, Starbucks’ vice president of Global Learning.

Eberhardt, who helped design the new retail degree with professionals at ASU’s W.P. Carey School of Business, says there are five general categories incorporated into the curriculum for the degree that are important to Starbucks. They are: people and team leadership; critical thinking and problem solving; business management; customer service; and sustainability.

Launching the Starbucks’ CAP program has naturally boosted enrollment for ASU, but Michael M. Crow, the university’s president, says the incentive for collaborating with Starbucks was not about numbers. It was more about fulfilling the university’s mission to widen diversity among its student base and

encouraging more individuals who don’t have the luxury of attending college full-time to find ways to obtain their degree, he asserts.

“ASU is pioneering a new university model focused on inclusivity and degree completion, and Starbucks is establishing a new precedent for the responsibility and role of a public company that leads through the lens of humanity and supports its partners’ life goals with access to education,” says Crow.

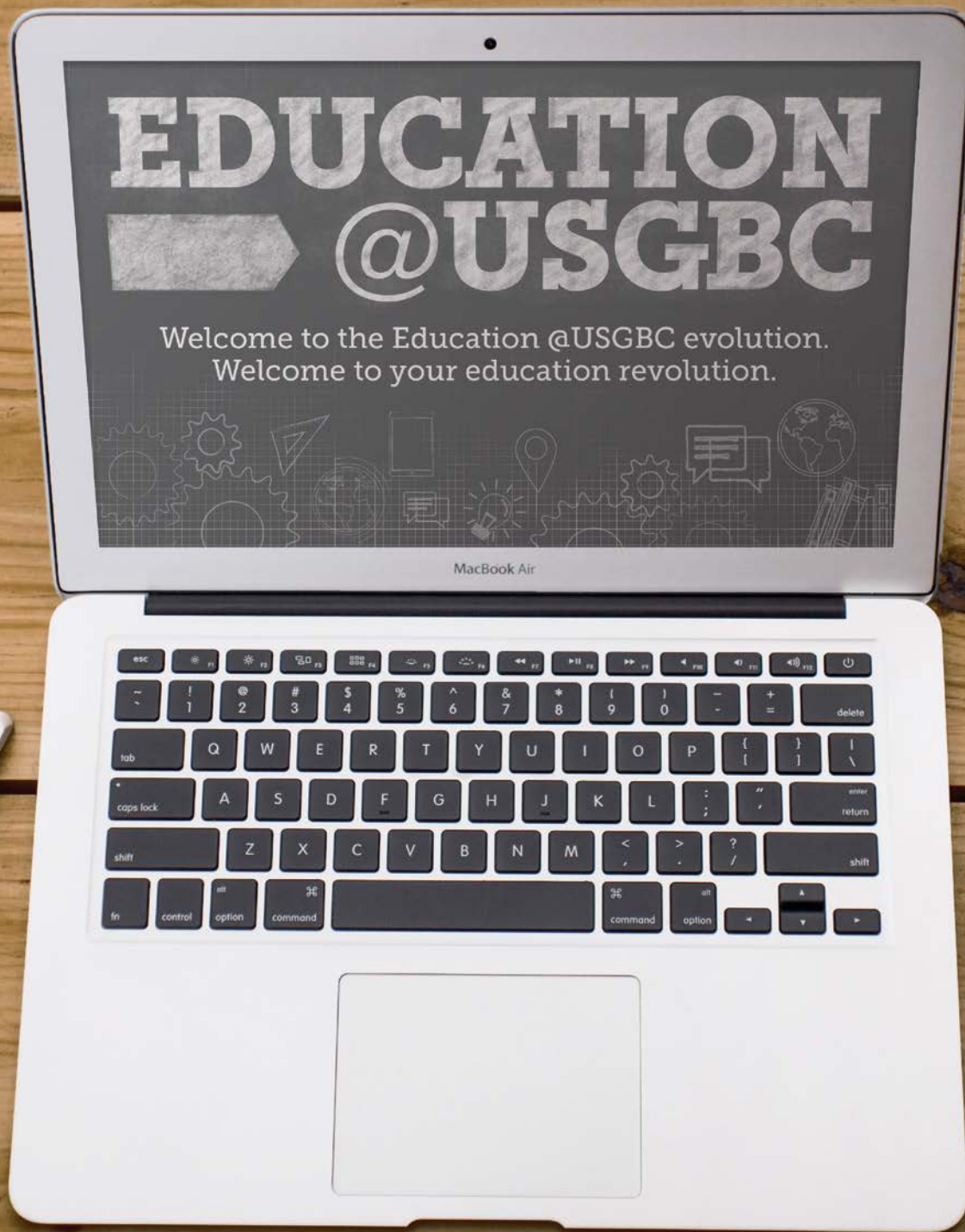
So far, ASU hasn’t collaborated with any other corporations to create a similar program, but is already receiving calls from other interested companies as Starbucks broadcasts success stories about the alliance, says Lingenselter.

First graduate will inspire others to follow

Kaede Clifford, a 13-year Starbucks veteran, claims the spotlight as the first company employee to report success in the College Achievement Plan program. She graduated summa cum laude in December with a bachelor of arts degree in Mass Communication and Media Studies.

Clifford started college years ago while she was working for Starbucks, took a semester off and never returned—until last year, she says. In the interim, she moved with various company positions from Seattle to Arizona and Germany, and then back to Washington state.

“It was important to me to finish my degree,” Clifford emphasizes. “I wanted to finish something I started and also I know it will provide more opportunities to further my career.” ●



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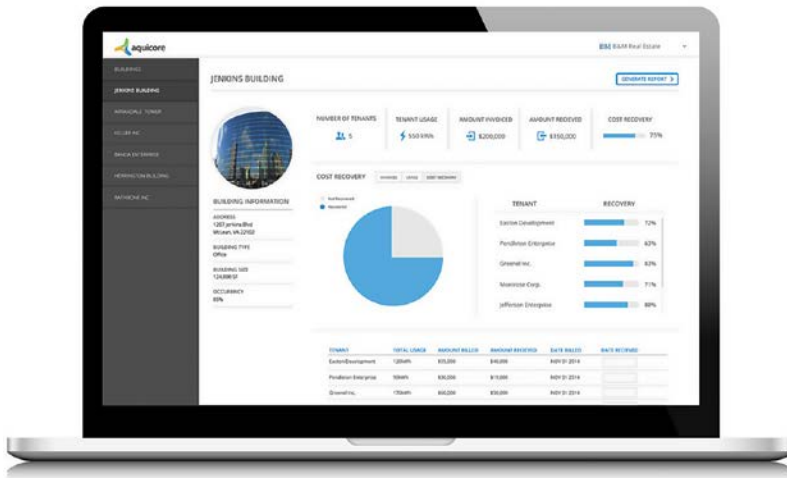


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ILLUSTRATION BY MELISSA MCGILL

Q&A

Bryna Dunn, LEED Fellow
director of planning
and sustainability at
Moseley Architects;
LEED Steering Committee
Immediate Past Chair

As the firm's director of sustainability planning, Bryna is able to exclusively focus on advancing the implementation and effectiveness of sustainable and energy-saving design strategies. Admired for her passion to protect the natural environment while improving the built environment, she has become one of the region's foremost experts on integrating green concepts into facility designs.

Q. How and why did you get into green building and LEED?

I have always been concerned, from a young age, about the disconnect between our built environment and our natural environment. I grew up in a military family and moved around a lot as a child, and so I saw a lot of different development patterns and rates of natural destruction. It took me until graduate school to realize that I wanted to work with the folks who design our built environment—these folks have such an amazing ability to see and shape the future. I wanted to be the part of that conversation that asked about the trees, and the water, and the energy demands, and the human health impacts. I decided the best way for me, with my background in biology and environmental science, to be part of that conversation was to work with the designers and the architects themselves. Lucky for me, as I embarked on my career as a lone biologist in an architecture firm, the U.S. Green Building Council (USGBC) was also embarking on their important journey with the launch of LEED v1.0. As it turns out, lots of people wanted in on this important conversation and it has been very rewarding to be a witness to the significant changes in the design and construction industry since the turn of the millennium.

Q. What has been your most challenging project?

Moseley Architects works predominantly in the public sector, designing education, local government, and detention/correctional facilities. Each of those markets has its own challenges, but the most challenging perhaps has been introducing "green" concepts to the detention/correction market. Jails and prisons, which operate 24/7/365, use a tremendous amount of resources—especially water and energy. They are also a building type that taxpayers, and therefore government authorities, are not terribly excited about throwing a lot of money at. At Moseley Architects, we have been fortunate to work with many clients in this market who are open to the conversation about how to save water, save energy, and improve the safety of the officers in these facilities through green design strategies, without breaking the bank. This effort, in the early years, was extremely challenging... but after being able to demonstrate with multiple projects that you can green a jail or prison in a fiscally responsible way, it perhaps has been among the most rewarding outcomes of my career.

Q. What's next for green building?

The immediate "next big thing" is net-zero buildings, starting with net-zero energy and spreading to net-zero water and net-zero waste. A few years ago, the mention of net-zero energy buildings was typically met with a quizzical look and a statement to the effect that nobody can afford that. But the mood seems to be changing, as does the market, and net-zero doesn't seem to be crazy talk any more. LEED has successfully transformed the market enough over the last decade and a half that people are now ready to talk about concepts like how we get to net-zero on a much larger scale. I believe we are ready to embark on the next phase of our journey to becoming a sustainable world, and being able to talk about new concepts like net-zero and net-positive is an important step.

 For more Q&A, visit plus.usgbc.org.



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