

by **DAVID WRIGHT**

Rooftop farming promises a bountiful source of fresh produce for the Big Apple year-round

GREEN ACRES

AT STREET LEVEL, THE SPRAWLING LOW-RISE BUILDING IN NORTH BROOKLYN OFFERS no hints, no surprises, and attracts little attention. The cracked and painted redbrick facade could belong to any old warehouse in this industrial end of town. In years past, it once housed a bowling alley, but today the unassuming structure is buzzing with activity again. However, it's not what's happening between the walls that has people talking—it's the stuff that's sprouting up top. Welcome to Gotham Greens, the first commercial-scale rooftop greenhouse in the U.S. and quite possibly a model enterprise to help feed an increasingly urban nation.

"People are demanding more transparency in how their food is produced and where it comes from," says Gotham Greens co-founder and CEO Viraj Puri. "Natural, sustainable, organic food is a booming industry. We recognized that shifting market, and there was a desire on our part to do something entrepreneurial that could address some of these concerns."

Rooftop agriculture isn't entirely new in New York—one enterprising Upper East Side merchant began growing crops on his roof back in 1995—but the magnitude of what's currently underway is unprecedented. Thanks to the timely convergence of technological innovation, entrepreneurial savvy and sheer will, Gotham Greens and other pioneers are blazing a trail in sustainable rooftop farming for all the world to follow.

"Greenhouse agriculture is practiced on a commercial scale in many parts of the globe, so a lot of the existing technology is robust," says Puri. "What's unique is how we brought all of that into the built environment—that makes this a very innovative project."

Puri and co-founder Eric Hailey established Gotham Greens in 2008 and began producing lettuce and basil in 2011. The 15,000-square-foot facility boasts state-of-the-art equipment, including 55-kilowatt solar panels to meet its electrical demands. Hydroponics eliminates the need for soil, and since water is continuously recaptured and reused, the crops require only one-tenth of the irrigation needed for conventional agriculture. A weather station monitors everything from carbon dioxide levels to light intensity, and a central computer

interprets the data to regulate vents, pumps, fans and other equipment. The greenhouse director, Jennifer Nelkin, can even use her cellphone to operate the facility's systems remotely.

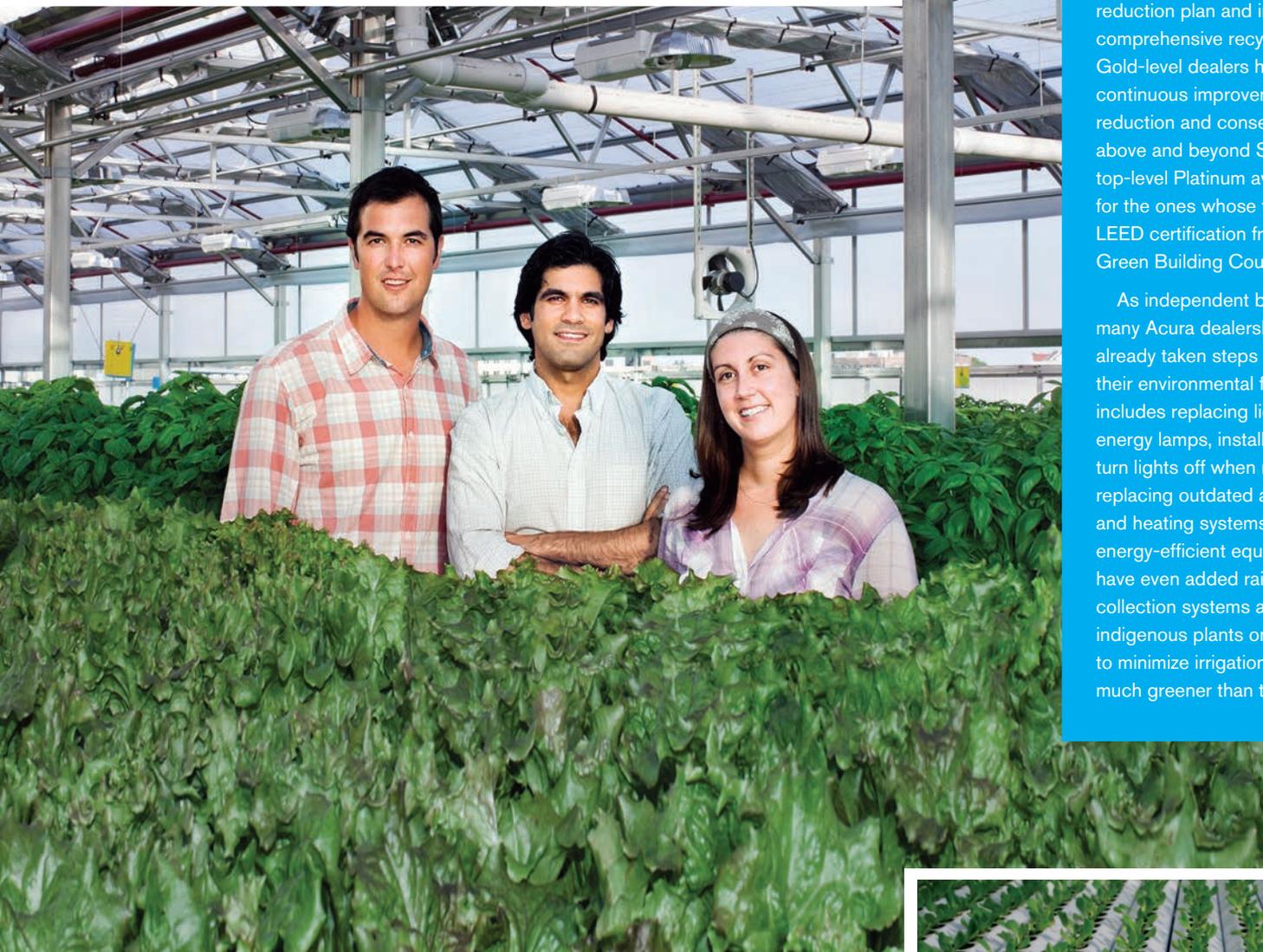
Within its first year after construction, the \$2-million greenhouse had already reached its projected targets, yielding 100 tons of fresh produce, which is distributed daily to high-end retail chains and restaurants throughout New York City, including Whole Foods, Fresh Direct and D'Agostino. So far, the most impressive nod came from Michael Anthony, the award-winning chef at Manhattan's renowned Gramercy Tavern, who created a special salad based on Gotham Greens lettuce.

"People with discerning palates have clearly endorsed our products," says Puri. "Now we want to sell to even more customers, and we'd like to broaden the diversity of our crops." Puri and his partners are already planning to build two additional facilities next year, along with another in 2014—"rooftop greenhouses similar to what we're doing now," Puri adds, "except bigger."

Following suit, New York-based BrightFarms recently announced plans for the world's largest rooftop farm above another Brooklyn warehouse—a 100,000-square-foot colossus able to generate a million pounds of produce annually. And with more than 940 million square feet of vacant rooftop space potentially available throughout the metropolis, you can be sure that Gotham Greens and other like-minded pioneers are just getting started. (A)



PHOTOGRAPHY: ARI BURLING PHOTOGRAPHY



Acura Rewards Dealerships

As part of its ongoing commitment to the environment, Acura recently launched the Acura Environmental Leadership Award program to recognize dealers who go the extra mile in reducing their environmental impact.

The Silver award goes to those who have cut total energy use by 10 percent, developed a water-use reduction plan and implemented a comprehensive recycling program. Gold-level dealers have maintained continuous improvement in their reduction and conservation goals above and beyond Silver. And the top-level Platinum award is reserved for the ones whose facilities earn LEED certification from the U.S. Green Building Council.

As independent businesses, many Acura dealerships have already taken steps to reduce their environmental footprint. That includes replacing lighting with low-energy lamps, installing sensors that turn lights off when not in use, and replacing outdated air-conditioning and heating systems with more energy-efficient equipment. Some have even added rainwater-collection systems and grow indigenous plants on their property to minimize irrigation. Doesn't get much greener than that.

Gotham Greens occupies the roof of a former bowling alley (top); co-founders Eric Hailey and Viraj Puri with greenhouse director Jennifer Nelkin (above); state-of-the-art hydroponic systems nourish crops and eliminate the need for soil (right).