



Chicago City Hall is a potent symbol of Mayor Richard M. Daley's crusade for a greener city, which includes plans for about a dozen LEED-certified city-owned buildings. Photo by Nathan Kirkman

MAGAZINE

Mayor Daley's Green Crusade

The longtime Chicago mayor has vowed to make his city the greenest in the nation.

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Posted July 01, 2004



Chicago City Hall features the country's first rooftop garden on a municipal building. Photo by Nathan Kirkman

On March 30, 2003, in the dead of night, a bulldozer lumbered through downtown Chicago toward its much celebrated lakefront. Dispatched by Mayor Richard M. Daley with a police escort, it turned onto a 90-acre peninsula, home to a tiny airport known as Meigs Field, and without warning, plowed giant Xs into the airport's single runway, rendering it useless. Chicagoans were stunned by this seemingly bizarre act of destruction. Mayor Daley said the war in Iraq and fears about airport security were the reasons for bulldozing the runway. This brass-knuckles move, however, stranded 16 airplanes—infuriating the corporate community and cementing Daley's reputation as an autocrat. Of course, it's not unheard of for unilateral action to be justified in the name of national security, even if the real motive turns out to be quite different. So what was the mayor's strong-arm tactic really about?

Believe it or not, a simple park.



CCGT
Before the Chicago Center for Green Technology could be renovated (by a design team led by Farr Associates) the city had to remove 600,000 cubic yards of illegal debris. Selling it for use

Daley has been working for years toward his oft-stated intention to make Chicago the greenest city in America, no small matter given its size and industrial past. Turning Meigs Field (now known by its original name, Northerly Island) into a park is just part of his ambitious vision.

First elected in 1989, Daley has since built the first municipal rooftop garden on City Hall and opened one of only five LEED (Leadership in Energy and Environmental Design) Platinum-certified buildings in the country. A dozen more city buildings are expected to be LEED certified, including three libraries, several fire stations, a police station, and a refueling station for the city's newly purchased fleet of natural-gas vehicles. The Department of Environment, established under Daley in 1992, has overseen the remediation of 1,000 acres of brownfield sites. Chicago has lured green technology businesses, such as solar-panel manufacturers, by using the city's purchasing power. An entire sustainable landscaping industry has sprung up around the city's beautification

in concrete manufacturing reduced the \$9 million cleanup tab by \$1.5 million.
Photo courtesy City of Chicago/Mark Farina



The center utilizes 36% recycled or renewable materials—like the entrance canopy built of reclaimed redwood from pickle barrels—50% of which is regional.
Photo courtesy City of Chicago/Mark Farina



Photovoltaic systems on the roof and the south facade reduce the cooling load while generating power. A stormwater management system recharges groundwater, reduces outflow to the city's sewer system, and biologically cleans the parking lot runoff.
Photo by Nathan Kirkman

initiatives. Daley has even hired a cadre of ambitious young assistants who answer directly to him on everything from improving wastewater management to overhauling the city's recycling program to restoring one of the largest wetland areas in North America, on the southeast side of Chicago.

"I've lived in the city all my life," Daley says at Chicago City Hall, a place he was quite familiar with even before taking office. His father was, of course, Richard J. Daley, the longest-serving mayor of Chicago, from 1955 to 1976. "My belief is that environmental initiatives should not just be out on the West Coast, in Alaska, or by the ocean, but in cities. If we don't do this, the expansion will be overwhelming; more cars, more concrete, more pollution in the air and water. They won't have any environment left out there, and no one will want to live here either."

Seated at a long conference table surrounded by reports and memos, Daley covers topics that ricochet from a grand vision of environmentalism to the vexing minutiae of urban life: the damaging effects of rock salt, poor drainage, abandoned gas stations; how to properly dispose of batteries and aerosol cans; and getting homeowners to disconnect their downspouts so rainwater can be returned to the earth rather than funneled into an overtaxed wastewater system.

"I like to say he's a janitor with a vision," says Barry Burton, a zoo horticulturalist from Detroit who came to Chicago's Department of Planning and Development in 1998 (he is now assistant to the mayor for landscaping initiatives). "It starts with him noticing the trees are all gone and having them replanted. Suddenly life springs up, and there are cafés and people where there were none before. Then it becomes, let's not just make it attractive but a healthier place. Trees reduce the heat-island effect and clean the air. Landscaping is labor intensive, so we provide a lot of jobs. That has turned into a model of economic development based on green technologies, attracting renewable-energy companies, and creating a sustainable landscaping industry."

As the legendary story is now retold, shortly after taking office Daley asked the Bureau of Forestry what had happened to all the trees he remembered from his childhood. Told they had been devastated by Dutch Elm disease, and that the bureau's entire budget went only to tree removal and not planting, he ordered the agency to redirect its resources. Despite some ridicule—this is still a meat-eating blue-collar town, after all—people's reaction to Daley's tree-planting initiative was mostly to applaud it (to date 400,000 trees have been planted, although that's still half the number Chicago had in the 1950s). Like any politician, Daley saw an opportunity to build on his success.

The next step might be called the 'Planter Phase.' Median strips with planters were built into city streets and filled like cornucopias with flowers, plants, shrubs, and of course, more trees. So far 63 miles of medians have been built and landscaped. It was then that



The CCGT's ground-level solar farm.
Photo by Nathan Kirkman

Daley was accused in this magazine of being the Martha Stewart of mayors (“Fussing with the Cityscape,” March 2001), and was criticized for focusing too much on aesthetics. “At first people didn’t really understand the larger benefits,” says Lisa Roberts, director of the Garfield Park Conservatory—one of the nation’s largest and oldest—which was on the verge of total collapse when Daley put her in charge of a complete renovation. “It’s not just about beautification. And he gets that. One of the smart things he did was to bring in some researchers to address city council members who showed that the presence of greening in people’s lives has a direct link to lowering crime rates, improving test scores, boosting real estate values, et cetera. That’s the stuff that people really care about. I’m not supposed to say this, but it’s not easy working for government. But when you’ve got a mayor like this one who, for all his faults, has this absolutely fantastic vision, you put up with a lot.”



The outside of the CCGT.
Photo courtesy City of Chicago/Mark Farina

The most remarkable aspect of Daley’s consciousness-raising green crusade is that, after stumbling into it, he has committed major resources to developing a holistic approach to greening the city. Nothing illustrates this better than the Chicago Center for Green Technology (CCGT), the first and only municipal building in the United States to be awarded LEED Platinum status by the U.S. Green Building Council. (Only six buildings in the entire world have achieved this ranking, all but one in the United States.)

What has become a showcase project costing approximately \$15 million started as a fairly routine enforcement action undertaken by the Department of Environment. A 17-acre site on Chicago’s beleaguered west side had become an illegal dump. The company running the site was supposed to be recycling concrete, asphalt, and other construction materials but instead allowed more than 600,000 cubic yards of debris to accumulate into pyramid-size piles nearly 70 feet tall. After winning a legal fight with the owner, the city petitioned the bankruptcy court to take control of the site in order to lead the cleanup effort.



Inside
The CCGT is an office building, educational facility, factory, and a “Garden in the City”—so multifunctional components, like a lobby that doubles as a classroom, were devised.

Once the site was remediated, rather than put it up for sale, the city decided to renovate the 1952 office building. But this wasn’t just any old rehab job. Seven years and \$5.4 million later, the 34,000-square-foot building opened in spring 2002 and features some of most innovative green technologies available—including geoexchange pumps, extensive daylighting, and a stormwater management system. “We pretty much went out and got every green thing we could think of,” says David Reynolds, first deputy commissioner at the Department of Environment, whose training as an engineer turned out to be quite useful for overseeing such a complex project. “When the mayor asks us to do something, we do it big and splashy the first time. After that you show how you can get the same benefit from a simpler system. But with this building, we went over the top.”

The CCGT is an educational and resource center where developers, architects, homeowners, and community gardeners can learn about the latest green technologies, such as rooftop gardening, recycled

Seventy-three percent of the floorplate is daylit, creating sizable energy savings. The building is cooled and heated by geo-exchange heat pumps, and the elevator uses canola oil rather than hydraulic fluid. It is one of only five LEED Platinum-certified buildings in the country. Photo by Nathan Kirkman



Green Fuel

Chicago was the first city to employ hydrogen-fueled buses. Now, The Illinois Coalition, the City of Chicago, and the State of Illinois are working on a long-term plan to provide hydrogen fuel filling stations along I-90 to allow ease of travel for alternative-powered vehicles. Construction is underway for a number of hydrogen energy demonstration projects along the highway.

Photo by Nathan Kirkman



Planters

Daley has changed the face of the city by incorporating greenery in as many ways as possible. On many major

building materials, solar panels, and sustainable landscaping. It also houses one of the Department of Environment's favorite programs: Greencorps Chicago, which teaches landscaping skills to difficult-to-employ people, many recently released from prison. The trainees then go out into the community and assist local gardeners with cleanup and replanting efforts. Just prior to graduation (about 200 have graduated so far), Greencorp trainees are placed in internships with landscaping companies. "Graduations are so meaningful," Reynolds says. "These are proud people, and they so often say, 'I've never completed something like this before.' We've got trainees who went from Greencorps to running crews at private landscape companies."

Many of the lessons learned from renovating CCGT have been incorporated into a comprehensive building standard based on LEED but adapted to the unique conditions of Chicago. So rather than have one fantastic building that sits like an island in a sea of inefficient and outmoded architecture, all new city buildings are mandated to use green building technologies, and millions have been committed to retrofitting existing buildings.

"It's not just about the Department of Environment over here going, 'Hey guys! Do these environmental things,'" Reynolds says. "It's the mayor saying, 'This is so important to me, I'm going to hire someone whose job it is to make sure all the departments are doing this.' Sadhu being hired is an indication of just how committed the mayor is to this."

Reynolds is referring to Sadhu Johnston, assistant to the mayor for green initiatives, a newly created position to coordinate Daley's green team. Until October 2003 Johnston was head of Cleveland's nonprofit Green Building Coalition. He had just presided over the opening of a renovated historic building that is now the city's environmental center. On a trip to Cleveland, Daley asked for a tour of the building, and Johnston happily obliged. A few weeks later he was recruited to work for Daley to coordinate all of the city's green initiatives. Before agreeing to take on such a daunting challenge, Johnston came to Chicago for a tour and was "blown away."

"The mayor realizes that greening strategies are about quality of life and about making cities competitive because they're great places to live," Johnston says. "In Portland or Seattle you expect it. But you look at Chicago and its industrial past, and it provides such a unique model for how big cities can go green."

The most ambitious undertaking to date is particularly relevant to the challenges of greening an old industrial city. In the farthest southeast section of the city is the Lake Calumet region, a 20-square-mile area that was once one of the largest wetland complexes in North America. In the late nineteenth century steel companies built factories there that eventually employed hundreds of thousands of people, and it became one of the most polluted. Over the last couple of decades manufacturing interests consolidated and decamped, as vast areas of wetlands that managed

boulevards throughout downtown Chicago, medians are now adorned with flowers, trees, and small parks.
Photo by Nathan Kirkman



Northerly Island

The mayor is converting Northerly Island—the site of the 1933 World's Fair and later Meigs Field, a private airport—into a public park, as it was intended when the island was built in the 1920s. His scheme calls for renewal of the landscape and the adaptive reuse of the existing terminal building for public programs.
Photo courtesy Associated Press



Click [here](#) to download a PDF version of the *Greening the Windy City* map.
Map by Criswell Lappin

to survive years of pollution, dumping, and destruction began to thrive again.

In 2000 the city of Chicago, the state of Illinois, and the Chicago Environmental Fund launched an ambitious program to mix industrial uses with wetland restoration; 3,000 acres will be designated for economic redevelopment, but 4,800 acres have been set aside for the Calumet Open Space Reserve, where preservation and restorative programs are already underway. Within the reserve will be the Ford Calumet Environmental Center, a research and education center for environmental remediation. The design competition attracted some of Chicago's best architects, including winners Studio Gang, Helmut Jahn, and Ross Barney + Jankowski.

At the unveiling of the five finalists' designs for the Environmental Center in March, Henry Henderson of the Chicago Environmental Fund fairly well summed up the whole point of urban green initiatives. "There are 2,000-plus species in the Calumet area," he said. "That is more diversity of species than you have in Yellowstone. And I would also point out that we have more manufacturing jobs here than they have in Yellowstone too. So we want the human economy and nature's economy to work together."

Of course all mayors want to make their cities healthier and greener, but Daley has the political power to see his agenda through. At the time of the bulldozer affair, he had just been elected to a fifth term, winning 79 percent of the vote. While his unprecedented popularity is in part the result of making Chicago a beautiful place to live, it's taken 15 years, five mayoral terms, and virtually unchallenged power to get this far. Landscaping aside, green initiatives are expensive and take a long time to come to fruition.

While plenty of people complain about Daley's dictatorial style—always off the record—when all is said and done very few will argue with the end results of Meigs Field/Northerly Island. On the one-year anniversary of the airport's destruction, Daley bragged it was one of the best decisions he's ever made. Private aviation interests "really don't care whether or not we have...public space," the Chicago Tribune quoted him as saying. "They don't care, but we care in the city of Chicago.... People live here, and they want that lakefront. It belongs to them and not to private businesses and not to small planes." Just as Rudolph Giuliani showed that cities don't have to be crime-ridden, Daley's leadership could permanently alter how urban dwellers across the United States expect to live in their natural habitats. And just as Giuliani stirred up controversy with his heavy-handed tactics, so has Daley. But to achieve such a fundamental paradigm shift, sometimes you have to dispatch the bulldozer.