

The Green Gang

Suddenly, local governments and businesses are embracing green solutions and technology. The results could transform the metro economy. by Leah Dobkin Monday 9/22/2008

photos by Peter DiAntoni

They are pencil-thin, long and loopy, with little buds on top, and vividly, invitingly green. Garlic scapes, the tendril-like tops of the garlic plant, are considered a gourmet delicacy, and at the Fondy Farmers Market on the city's North Side, they have become the hottest seller for the Walnut Way Conservation Corp. "When we take them to market they just fly off the tables. People come back every week just for the scape," says Sharon Adams, Walnut Way's executive director.

If it seems surprising to see gourmet produce grown in central city gardens, it's merely one indication of how things have changed in the neighborhood bordered by 12th Street, Fond du Lac Avenue, North Avenue and Walnut Street.

Adams had grown up in the neighborhood, and remembered it as a good place, back before I-43 demolished hundreds of homes and businesses in the area, before the 1967 riot made it seem dangerous, before middle-class black families began deserting it. It became a ghetto plagued by poverty, crime and prostitution, and filled with empty, litter-strewn lots and abandoned homes infested with drug dealers.

But Adams and husband Larry moved into the neighborhood in 1997 and vowed to transform it. Working with other residents, they formed the Walnut Way Conservation Corp. and began reclaiming their neighborhood "block by block, neighbor by neighbor," Sharon says.

A drug house, slated for demolition, was deeded to the group by the city. Neighbors transformed it into the beautiful Walnut Way Neighborhood Center.

Walnut Way also benefited from Milwaukee's first infill Tax Incremental Finance District, launched in 1996, which provided 10,000 small loans for housing rehab or new construction on the near North Side. The \$2.6 million in funding came not from property taxes, but from the Local Initiatives Support Corporation, a nonprofit mostly financed by local banks. Many of those loans went to Walnut Way and helped build more than 100 new homes and renovate many others.

Meanwhile, the residents, many of whom have southern, agricultural roots, went to work reclaiming and farming the empty lots. The city deeded five lots to Walnut Way, and these now grow more than enough produce for the neighborhood. The rest is sold at the farmers market, adding to the neighborhood's economic vitality.

Sharon convinced neighbors to let teenagers in the area plant and maintain perennial flower gardens in their back yards. The flowers sell well at the market, too.

"People ask me if I was afraid the teenagers would hurt me, and I say, 'No, they help me and we help them,' " says Sharon.

Another big seller is Walnut Way honey. Larry has an apiary where he and his neighbors produce honey and byproducts like wax and candles that they put up for sale. They keep bees for pollination and for educational purposes. "We learned that an urban environment is better for bees. I think we have some of the best tasting honey," says Sharon.

The residents also have installed 40 rain gardens to reduce stormwater runoff, and created a nursery to grow trees that beautify and shade the community.

The goal was to save the neighborhood, but the results have created an almost utopian little green community. It relies less on auto and truck transit for food, helps combat global warming by planting trees and other greenery, and uses things like the rain gardens and other approaches to manage stormwater runoff. Walnut Way has attracted visits from national and even international groups, including some from South Korea and China, examining how a green community was created.

Across America, skyrocketing gas prices, declining or degraded water supplies and the threat of global warming are pushing states and communities to find environmentally sustainable ways to meet their energy and water needs. California has mandated fuel-efficiency standards and subsidized solar energy development. Portland, Ore., is surrounding itself with wind farms. Chicago is embracing green roofs. Madison passed an ordinance allowing up to four chickens on a property. (Alarm clock sales may go down.)

How does Milwaukee stack up? According to James Elsen, chief executive of SustainLane, a company that ranks cities on sustainability practices, Milwaukee is the 16th-most sustainable of the top 50 cities in America. "Every mayor wants to be the greatest city. It's fun to watch them compete with each other," says Elsen.

The city of Milwaukee is installing green roofs and more efficient light bulbs, greening school playgrounds and embracing geothermal heating. Waukesha has greatly reduced per-person water usage and is decreasing energy usage by city buildings.

But really, private industry leads the way in the metro area. Companies like Johnson Controls, Paradigm Sensors and Milwaukee Composites are creating energy-saving products. Perhaps most promising is the mix of university and private-sector experts on water technology – the country's largest such assemblage of talent, which explains why the Milwaukee 7 economic

development group has touted this as a potential home run for the local economy.

The sheer range of initiatives in the region could eventually turn this one-time redoubt of the Rust Belt into a Green Belt or, as Milwaukee's mayor has dubbed it, a Fresh Coast city – with a buzzing new economy.

The Green Team

In February 2005, Mayor Tom Barrett appointed 11 business, community and environmental leaders to a newly dubbed Green Team. Their task: to recommend cost-efficient ways the city and private sector can restore Lake Michigan and local rivers, reduce energy costs and create jobs through environmental innovations. "Milwaukeeans are innovators," Barrett declares. "We have been for generations. We have many residents and businesses who are partners in leading sustainability efforts and at the forefront of green development."

A key Green Team recommendation was to create an Office of Environmental Sustainability led by a new cabinet-

level position. Ann Beier, its new director, was hired in June 2006. A native of northern Wisconsin, Beier has worked for the federal Environmental Protection Agency and the Oregon state government, and has 20 years experience working on water, transportation and land use issues. "I saw this job and I thought,

'That sounds like fun,' " she says. "It's got energy, it's got water, it's got all these broader areas. And it's a great city."

Her office is a good deal for taxpayers. Its \$100,000 in city funding is offset indirectly by energy savings and a federal grant from the Department of Energy. Beier has no staff of her own, but she gets to borrow any other department staff. The idea is to leverage this position to get other departments to incorporate sustainability, she notes.

Buildings are the greatest energy users, creating about 40 percent of all greenhouse gas emissions. The city established a goal of reducing its energy by 15 percent by 2012. To date, the city has conducted audits on three municipal buildings, leading to energy reductions of 9 percent, or \$35,000 a year. That leaves 243 buildings to go! To city workers' surprise, "the quickest paybacks are just changing light bulbs," says Beier, replacing old incandescents with more efficient fluorescent bulbs.

The Washington Park Public Library's green features include a geothermal heating system, which uses water flowing through piping in 36 wells to extract heat from the earth in winter and release heat in summer. According to Taj Schoening, the city library system's business operations manager, the new buildings should increase energy efficiency by about 20 percent.

The city also has increased its purchase of renewable energy, such as solar and wind, from 1 percent in 2005 to 10 percent in 2008, while the proportion of alternative fuel vehicles in the city fleet has risen from 7 percent to 41 percent.

To meet its goal of reducing stormwater runoff from its properties by 15 percent, Milwaukee is experimenting with different pavement types – porous concrete, small stones, etc. – to allow water to settle into the ground rather than flow into sewer drains.

Some innovations combine water and energy goals. Green roofs – using plant vegetation or gardens – absorb runoff, but also save energy by cooling the building and reducing air conditioning usage. Green roofs can also grow flowers, vegetables and fruit for local consumption, reducing the need for long distance transport.

Another advantage: "Extended roof longevity," notes Warren Jones, modernization and development manager for the Milwaukee Housing Authority. All of which may explain why the green roofing industry has grown by 30 percent nationally in the last year, according toGreenroofs.com. The city has so far installed green roofs on three buildings, with plans to take on the Downtown library building. That leaves about 125 flat-roofed buildings that are candidates for greening.

The Milwaukee Housing Authority has installed the nation's first public-housing green roof at Highland Gardens on the near North Side. Convent Hill, on the city's East Side at Ogden Avenue and Milwaukee Street, is another public housing project that's a green star: It has a green roof, solar thermal water system, Energy Star fixtures and appliances, increased boiler efficiency, thermal pane windows, water-restricting showerheads and low-flush toilets. Flooring is made from renewable and recycled resources like bamboo and rubber.

The city also created the new position of Urban Agricultural Coordinator, and Michael Veith was hired. Veith works with community leaders through the Milwaukee Urban Agriculture Network (which meets on these issues) to see how city policies can foster urban agriculture. According to Veith, the city has 2,000 empty lots, 10 percent of which are usable for urban gardens. That could create a lot of locally grown produce.

For city officials, it's still a new way to think. Urban farming advocates like the nonprofit Growing Power are pushing for this. Sharon Adams, whose Walnut Way group learned about soil remediation from

Growing Power, is also an advocate. "We are talking about an income stream that could be just as vibrant over time as manufacturing used to be for Milwaukee," she says.

Another interesting initiative has been jointly pursued by the city and Milwaukee Public Schools to green over asphalt playgrounds, which has since been imitated by cities like Los Angeles. Milwaukee has so far transformed 36 schools and created approximately 4.4 football fields of green space for children to play on while also reducing stormwater runoff.

Temperatures on the pavement can get up to 115 degrees. "School playgrounds cannot be a safe haven if we are baking our children like potatoes," says Cole Preston, the city's environmental services superintendent. "I used to notice children not playing at schoolyards, but standing next to the school in order to stay in the shade."

Now the yards are cool enough for kids to play on. And teachers are using the new green space as outdoor classrooms to teach about horticulture, environmental sciences and stewardship.

The city is working with the Milwaukee Metropolitan Sewerage District to revise requirements for driveways and parking lots to allow the use of porous pavement without a variance. The city is putting more green infrastructure around sidewalks and allowing narrower streets, which Beier noted has the surprise benefit of saving maintenance costs and slowing down cars in residential neighborhoods.

City planners are trying to create incentives – or just free the way – for residents and businesses to go green. A Green Building Task Force is trying to remove bureaucratic hurdles and create fast-track permits for green buildings. It's also offering density bonuses (to encourage the development of more walkable neighborhoods that de-emphasize driving) to housing developers in locations that make sense, like the lakefront or Third Ward. Meanwhile, the city is looking for ways to support green entrepreneurs in the private sector.

Green Businesses

Robert Young is an unassuming man with a pioneering spirit. The 55-year-old African-American is the chief executive of Paradigm Sensors, one of the first tenants to move into a new technology incubator being redeveloped the 30th Street Corridor. The city hopes this area, a cemetery for old manufacturing companies, can become a hub of the new green economy.

Paradigm Sensors is a minority-owned, clean-tech company that developed a patent with Marquette's College of Engineering for a handheld sensor to test the quality of biofuel. Some biodiesel is made from soy oil or canola, rapeseed, palm oil, etc., but the rising prices of those oils led biodiesel producers to use animal fats or even reused vegetable oil from restaurants to reduce costs.

Almost half of Milwaukee's city's fleet uses biodiesel, which can coagulate in the winter. The city pilottested Paradigm's sensor to help create a biodiesel mix that functions well in cold weather. As a result of this partnership with the city, the fleet runs better and Paradigm has confirmed the value of its product. The company hopes to create 93 new jobs over the next three years. "We anticipate enormous growth," Young says.

The city soon hopes to have its first biodiesel producer: Innovation Fuels, an East Coast company, is seeking capital to build a Midwest plant located at the Port of Milwaukee.

"Everyone agrees biodiesel is here to stay because it helps assure cleaner air, reduces the carbon footprint, and reduces U.S. dependence on foreign oil," Young notes, "rather than sending our dollars overseas for oil produced by, in some instances, our adversaries."

Gov. Jim Doyle has launched a \$150 million, 10-year program (the Wisconsin Energy Independence Fund) to make Wisconsin a leader in renewable energy and green jobs, providing grants and loans to companies engaged in cutting-edge research, development and production.

Another fast-growing green company in town, though it might not seem so at first glance, is Milwaukee Composites. If you attended the Summer Olympics, you probably stood on Milwaukee Composites flooring when you rode one of Beijing's five new subways created for the event. This Oak Creek company makes durable, lightweight flooring and ceilings for public transportation. The lighter weight means less fuel is needed to transport riders.

The Apollo Alliance, a national organization started in Wisconsin and now based in San Francisco, is a coalition of business, labor and community leaders promoting companies creating well-paid, career-track green jobs. These tend to be local jobs because many involve retrofitting buildings, installing solar panels, constructing transit lines and landscaping.

According to Tim Sheehy, president of the Metro Milwaukee Association of Commerce, there are a number of green companies in town that may be marketed in such a way – like Johnson Controls, the state's biggest manufacturer, which produces batteries for hybrid vehicles and foam padding from renewable materials that's used for car seats. He also points to Harley-Davidson, which is redesigning its engines to make them more fuel efficient: "I don't think Harley-Davidson is marketing itself as a green motorcycle manufacturer." (Not yet, but perhaps it should.)

Milwaukee is known for its small-engine manufacturers, and companies like Briggs & Stratton must inevitably become greener. "If green and energy-efficient technology is important to the customers, the cost, or the selling of the product, we will be as green as we need to be," Sheehy says. "We survived as leading manufacturers in the world on that basis."

Perhaps the most promising green sector of the Milwaukee economy is freshwater research and water technology. Southeastern Wisconsin's Milwaukee 7 consortium has established a Water Council: The hope is to tap into Milwaukee's major asset, Lake Michigan, and attract new water-related industries and researchers.

The seven-county region already has 120 companies involved in water technology, according to Rich Meeusen, chairman, president and CEO of Badger Meter Inc., a Milwaukee company that manufactures water meters and control technologies. Meeusen estimates there are 2,000 to 3,000 water-related jobs in our region, and industry sources project a 6 to 10 percent annual growth rate for the \$100 billion U.S. water industry over the next five years.

There are also 87 water-related research academics in our region, according to Sammis White, an associate dean and researcher at UW-Milwaukee. "We have the largest collection of wastewater professionals and talent in the country," says White, citing a recent study commissioned by the Greater Milwaukee Committee. The hope is that UWM's new graduate-level School of Freshwater Sciences will compliment its Great Lakes WATER Institute and together help trigger growth in water-technology industries.

Besides building green companies and jobs, water technology can directly improve

the quality of life for local residents. Take Procorp Enterprises, a local company that specializes in sustainable water and wastewater treatment. Many communities are banning water-softening systems that use salt, a corrosive agent that can eat through pipes and harm freshwater ecosystems. Procorp has developed two patents involving salt-free softeners using limestone or magnesium. They are currently testing a related system that removes radium in groundwater in Waukesha. If successful, this system could

be a godsend for Waukesha, where the underground water table has fallen because of overuse and radium levels can be twice the federally allowed limit.

The metro area has a wide range of water problems, from pharmaceuticals in our drinking water to invasive species in Lake Michigan and PCBs found in sewer pipes.

If local companies and academics can solve these problems, it could lead to money-making applications and global sales. According to the World Water Council, some 1.1 billion people worldwide lack safe drinking water, and some 4,000 children die each day from waterborne illnesses. Milwaukee could help lead the way in solving such problems.

Green Buildings

Joel Rogers won a MacArthur "genius" grant in 1995, andwas recently named xby *Newsweek* as one of the 100 Americans most likely to affect U.S. politics in the 21st century. He is executive director of the Center on Wisconsin Strategy, a nonprofit policy center for sustainable economic development based in Madison. COWS is pushing an ambitious project to retrofit buildings in Milwaukee to make them more energy-efficient.

For all the attention given to automobiles, it's buildings that provide the most potential for energy savings. Energy conservation has been called the "first fuel" – the fastest, cheapest way to reduce global warming and skyrocketing energy costs.

"They are the low-hanging fruit when it comes to green jobs," says Kate Gordon, interim co-director of the Apollo Alliance, "because the work can be done fairly quickly using existing, off-the-shelf technology, and can be easily tied into workforce training programs."

The COWS plan for Milwaukee is to offer homeowners, businesses and institutional building owners no upfront cost to install conservation measures that are paid for by the energy savings. COWS is working with numerous partners, including the city, We Energies, the Wisconsin Public Service Commission and the Wisconsin Department of Administration. The project is called Milwaukee Energy Efficiency, or ME2.

In essence, ME2 would give building owners a "loan" to pay for retrofitting, but the money would repaid over time through the energy savings, all to be accounted for on the gas/electric bills by We Energies. Should a building be sold, the contract for this loan would be transferred to the new owner. The process would be completely painless, with no money out of pocket for the building's owner.

Because repayment is guaranteed through energy savings on participants' utility bills, this should be an attractive deal for private lenders. ME2 hopes to raise some \$500 million in private capital.

The project will begin recruiting and training local workers in 2009 for jobs doing energy audits, installing insulation and lighting, replacing appliances, and upgrading heating, ventilation and air conditioning. The project should generate about 4,300 jobs, and probably several times more when you include the multiplier effect on the economy, Rogers predicts.

Nationally, no city has tried a plan of this magnitude. "The ME2 project is an incredibly innovative and exciting project that will be a model for other cities," says Gordon.

Rogers estimates a 20-percent reduction in average energy costs for retrofitted buildings. "If this model was employed statewide, it could raise billions through energy-efficiency improvements," he predicts.

New homes also need to become more energy efficient. In the next 30 years, half of the nation's buildings will be replaced. Cities that seize the chance to develop and install new technologies and building materials may be winners in the new economy.

Nationally, standards for sustainable, green buildings have been developed by the United States Green Building Council, which certifies buildings for Leadership in Energy and Environment Design. LEEDcertified buildings have lower energy and water usage, and improved day lighting and airflow, which creates a healthier environment for occupants. While there are greater upfront costs, they're typically recouped in three years through energy savings.

Currently, there are only 10 LEED-certified buildings in Milwaukee, including the Urban Ecology Center, Schlitz Audubon Center and the new Johnson Controls facilities. Sue Loomans, interim executive director of the Wisconsin Green Building Alliance, thinks Milwaukee is behind many cities. "It's time to get moving if we want to make our mark nationally," she says.

Another area that needs more development is solar energy. Prices for solar technology are going down, as are payback periods, according to industry experts. But there is one problem with solar, and it's not Milwaukee's overcast winters. The number of people with solar expertise is simply not keeping up with demand in our community. For example, Amy Taivalkoski, an energy assessor who evaluates the feasibility and costs for both solar and wind power, says she has a four-month waiting list for her services, which she calls the norm for the region's other 29 energy assessors.

But that's about to change. Using a \$200,000 grant from the Department of Energy to build a solar infrastructure, the city of Milwaukee is paying the Midwest Renewable Energy Association to train certified solar panel installers and assessors. Tehri Parker, a solar energy coach for Midwest, has begun providing the training and will lead a tour of solar homes in the area, giving homeowners a chance to see working systems in place.

One great place to tour is the Unitarian Universalist Church West in Brookfield, the first area church to install solar electric. Rev. Suzelle Lynch says her congregation wanted to educate members on global warming and other environmental issues. "Living sustainably is an important part of our religious commitment," she says. "Unitarian Universalists believe all life is linked in one sacred and interdependent web, and we must do all we can to protect our planet."

Since the installation of its solar panels, the church generates its own power, selling the excess back to We Energies at 22 cents a kilowatt hour. It saves \$2,150 a year on energy costs.

The church did hit one snag. The city of Brookfield's building code required a screen to go around the solar panels so they could not be seen from the road. The requirement decreased energy efficiency by blocking sun from the panels, and added extra costs to the installation.

The congregation discovered a state law that prohibits municipalities from placing undue cost burdens when installing renewable energy. The church ultimately convinced the Brookfield Planning Board to reverse its decision.

"We want people to see our panels; they're not unattractive," says Lynch. "Our passionate desire is to be a resource so other congregations and people can learn how to do this."

Battling Over Green

Last summer, a huge hot air balloon plastered with thewords: "Global Warming Alarmism: Lost Jobs, Higher Taxes, Less Freedom" floated over Milwaukee. It was part of a national "Hot Air Tour" sponsored by the Americans for Prosperity, an organization that advocates for limited government and free markets.

Mark Block, a Republican activist and state director of Americans for Prosperity, says the "green movement's approaches" are wrong and harmful. "Many in the movement fail to

recognize that government regulation and a punitive approach to environmental sustainability stifle innovation and make the world a less free place for our children," he says.

But in Republican-leaning Washington County, Paul Mueller, administrator of the Planning and Parks Department, brags about its effort to adopt a smart growth plan that includes Primary Environment Corridors. The approach identifies and protects wetlands and other sensitive environmental areas, restricting development there and thus inhibiting suburban sprawl, a favorite goal of urbanists.

In the city of Waukesha, which leans slightly Republican but has a longtime Democrat as mayor, its water conservation efforts have won it a national reputation.

The city passed a comprehensive conservation plan that resulted in a water usage dropping nearly 8 percent, even though the city is growing, according to Mayor Larry Nelson. One approach that's helped: Waukesha is the first city in the state to charge the heaviest water users more.

The city tackled rising energy costs by having Johnson Controls do energy audits of all city buildings. These audits and the resulting improvements are expected to save the city \$2.3 million over the 10 years from 2007 to 2017. "The energy company called to make sure the monitoring equipment was working because usage dropped so much," says Nelson.

The mayor is also concerned about suburban sprawl, which can maximize energy costs. "The two biggest recent developments in Waukesha are infill developments," he notes. The recently approved Super Wal-Mart, which Nelson says will be the greenest building in Waukesha, will be built on a vacant lot that once was a concrete company site. And a 55-acre shopping center is planned for an old food distribution site that's been closed for five years.

Groups like the Waukesha County Economic Development Corporation and the Milwaukee 7 have also proclaimed the need to embrace green approaches. "When the Pentagon, Wal-Mart and the Southeast Wisconsin business community agree that green and sustainable practices are the way to go, I think we've reached the tipping point in terms of consensus for the future," says Nelson.

Not quite. Last year's meeting sponsored by AFP to educate the public about "the costs of global warming" was attended by conservatives such as Republican U.S. Rep. Jim Sensenbrenner, Milwaukee County Executive Scott Walker, state Rep. Jim Ott (R-Mequon) and WISN-AM talk show host Vicki McKenna. Sensenbrenner has called on Congress to focus less on the threats of global warming and more on the "real threat of high energy prices and energy security."

Feelings are much different in liberal-leaning Shorewood, where last summer a group of citizens handed out reusable shopping bags to all 6,900 residents. The goal of the campaign was to stem the tide of plastic shopping bags, which take thousands of years to decompose and clog up storm drains and landfills.

But this rather innocuous campaign succeeded in dividing the metro area: It received positive comments and coverage from TV, radio and print locally and even internationally. But WTMJ-AM talk show host Charlie Sykes was critical of the project, as were local conservative blogs like *Boots and Sabers*, which complained of "the herd mentality in Shorewood," predicting that anyone using plastic bags "anywhere within Shorewood from now on [can] expect to get glares of disapproval."

Shorewood resident Paul Erickson has a daughter and son who attend public school in Shorewood, and he says both were harassed for not believing that global warming is a serious problem. His daughter had a rough day at school after reading her essay aloud on why humans cannotimpact global warming. (The assignment was to write an essay about what you can do to reduce global warming.)

"Kids in the class teased her and she came home crying, and her teacher gave her sympathy points for being brave," says Erickson. "My daughter took a lot of abuse."

The political divisions over the issue can be unpredictable. Some members of the Christian right who formerly opposed environmentalists have changed their perspective. Christian Care is pushing strongly for environmental stewardship. It now distributes bumper stickers on hybrid cars that read, "If Jesus Was Alive Today, What Would He Drive?"

But whatever the arguments over global warming, seemingly everyone wants to become more energy independent and efficient. The skyrocketing cost of gas, energy and food is pushing communities across America, and politicians on both the left and right, to support efforts to save energy and promote green companies and jobs.

The greater Milwaukee area has a growing consensus of labor, business, educational and community representatives who believe green strategies can drive economic growth. But is there enough leadership? "The No. 1 aspect that drives sustainability in cities is leadership," says James Elsen of SustainLane.

Beier is optimistic. "There is a stronger sense of community here than in any other place I lived," she says. "Milwaukee has this can-do spirit. Everyone I talk to about this topic says, 'Oh yeah, we can do this.' "

In Walnut Way, neighbors decided to plant peach trees two years ago, partly for shade, and this summer they unexpectedly produced loads of peaches. "Did you know that peaches could grow in Wisconsin? Well we didn't," says Sharon Adams.

The neighborhood is also growing advocates of urban farming. Walnut Way now has a summer internship program for neighborhood teens. One intern is 15-year old Jacob Washington, who lives three blocks from the community garden he tends. "I didn't know how to garden before this project," he says. "The closest I got was mowing the lawn."

This is Jacob's second year in the program, and besides learning how to grow food, he is also learning how to sell it. "I know I can be a businessman if I put my mind to it," he says.

But what he really wants to do, Jacob has told the adults, is become a community activist. In the years to come, he'd like to replicate this project in other communities. n

Leah Dobkin is a Milwaukee-based freelancer. Let her know what you think at letters@milwaukeemagazine.com.

Various States of Green

How green are other states and cities?

Texas leads the nation in the generation of wind power. Washington leads in hydro power. California is the top solar and geothermal energy producer.

Portland, Ore., is the green mecca in the U.S., ranking first on SustainLane's list of sustainable cities. To help depressed farming communities surrounding the city, the state of Oregon helped farmers finance wind farms, and the city guaranteed the purchase of that energy for government buildings.

Mayor Richard Daley has greened Chicago with 1,000 new trees and groomed planting beds. "He's scored on all fronts; the city looks better, feels better, and the new green image did positively affect economic growth in the city," observes Paul Mueller, administrator here for Washington County's Department of Parks and Public Planning.

Oakland, Calif., created a successful job-training program to create green-collar jobs. Unemployed people were trained and hired to retrofit city buildings to make them more energy-efficient. Energy savings was calculated at 65 percent, and that savings went back to the city to pay for the program and improve city services. The program even lowered crime, its supporters claim.

But perhaps no city has been more creative than Austin, Texas. The city is pushing a new electric car called the plug-in, which runs almost entirely on electricity and has a big rechargeable battery. The city envisions the parked electric cars plugging into a network operated by the city's utility, which would then use the powerful car batteries as a big storage system from which to draw power during peak demand in the afternoon while people are working. Drivers would be charged for electricity their cars take in at night and credited for electricity the utility company draws from the cars during the day. In essence, the city's electric grid and the transportation sector would be unified into one system. Charge your brain with that.

Milwaukee's Green Score

What accounts for Milwaukee's rank as the 16th-most environmentally sustainable city?

James Elsen, whose company SustainLane does the rankings, cites transportation. Milwaukee's bus system, even though it has declined, still gets high marks for the number of people using public transportation. "Ridership impacts so many different areas such as congestion, air quality, fuel use, global warming and the local economy," says Elsen.

Milwaukee is also geographically well-positioned for farmers markets and local produce because we are surrounded by agriculture. "Fuel affects the price and availability of food and Milwaukee will be sheltered from that because of its great network of local food," he notes.

And Milwaukee ranks high in uncongested roads, walkability, urban agriculture and promoting a green economy, Elsen says.

Ann Beier, Milwaukee's environmental sustainability director, would love to see the city's ranking rise higher. "I keep looking at the people ahead of us, wondering how we can pop off San Diego, but it's a tough list," she says.