

What Should a Community do to Become Green?

Gearing up for Alternative Energy

Stories from: Ann Arbor - Coldwater - East Grand Rapids - Lake Isabella -Lansing - Linden - Spring Lake

Inside:

Definitions, Principles, and the Eight Michigan Initiatives of Green Infrastructure

Sustainable Energy, Green Building, and Green Infrastructure

The Michigan Municipal League is the Michigan association of cities, villages and urban townships. A nonpartisan advocacy organization, the League works through cooperative efforts to strengthen the quality of municipal government and administration by providing technical assistance and information to local officials regarding municipal issues.

Headquarters

1675 Green Rd., P.O. Box 1487 Ann Arbor, MI 48106-1487 734-662-3246 or 800-653-2483 FAX: 734-662-8083

Email: info@mml.org
Website: www.mml.org

Lansing Office 208 N. Capitol Ave 1st Floor Lansing, MI 48933 517-485-1314 or 800-995-2674 FAX: 517-372-7476

Northern Field Office 200 Minneapolis Avenue Gladstone, MI 49837-1931 906-428-0100 Fax: 906-428-0101 Email: ckennedy@mml.org

Executive Director: Daniel P. Gilmartin

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## **Executive Director's Message**

By Daniel P. Gilmartin

# Going Green is Good for the Environment and for Your Bottom Line

Implementing cutting edge strategies is a vital part of moving Michigan's communities forward in the twenty-first century. Sometimes this involves taking risks in order to be innovative. Other times it may cause you to step a little out of your comfort zone and be a forerunner in moving your community in a new and potentially more thriving direction. What better time to visit the constantly expanding field of "green" community initiatives?

An ever-increasing emphasis on the sustainable environment has skyrocketed the number and scope of community green initiatives during the last decade. Many forward-thinking local leaders have developed flagship programs in the areas of electric generation, alternative transportation, the certification of green buildings, open space protection, and recycling. Portland, Oregon, for example, is often referred to as America's top green city because half of its power comes from renewable sources—a quarter of the workforce commutes by bike, carpool, or public transportation, and it has 35 buildings certified by the U.S. Green Building Council. Boston has preliminary plans for a plant to turn 50,000 tons of yard waste into power and fertilizer. Both communities can point to an improved quality of life for their citizens because of their local government's vision and effort.

In addition to environmental trend setters like Portland and Boston, a quick review of the other American cities that top the green lists reads like a "Who's Who" of the nation's most powerful local economies. Is this just a coincidence? Experts say no. In a society that continues to place a greater emphasis on environmental stewardship, going green can help make your community a very attractive destination point for people and businesses alike. This trend is expected to increase exponentially in the coming decades, providing an extra economic incentive for local governments to implement environmentally sensitive public policies.

I think that it is important to note that many communities throughout Michigan are leading the way in implementing green strategies designed to improve quality of life, conserve taxpayer dollars, and grow their local economies. In this issue of The Review, we examine a first-rate collection of programs and projects in communities of all shapes and sizes from throughout Michigan. Programs in Ann Arbor, Coldwater, East Grand Rapids, Lake Isabella, Lansing, Linden, and Spring Lake are all highlighted, providing direction and motivation for others to utilize in adopting their own programs. Additionally, there are several articles from League staff members that provide details on the state and federal efforts that will impact how local governments answer the environmental call in the coming years.

We also place a very proud spotlight on our new Capital Office in Lansing which, under the expert direction of the Christman Company, is poised to be Leadership in Energy and Environmental Design (LEED) certified at the highest levels.

I realize that the thought of implementing a comprehensive set of green policies for your community may seem a bit daunting given all of the other issues currently facing local governments. But consider for a moment the unique, and even envious, position that community leaders find themselves in when it comes to green initiatives. According to Green Cities author Matthew Kahn, communities, like universities, are learning laboratories. They provide arenas in which to test new policies, new ideas, and new initiatives. The scale is small enough to make adjustments, and large enough to measure real impact.

I urge you to read the many important articles in this issue and to visit the League's website to gain more information on green strategies for community leaders.

Daniel P. Gilmartin is executive director of the Michigan Municipal League. You may contact him at 734-669-6302, 800-653-2483 or dpg@mml.org.

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#### Magazine Staff

Kim Cekola, Editor

Breanne Bloomquist, Graphic Designer

Tawny Pruitt, Copy Editor

Susan Vasher, Address Changes

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The League's new Capital Office will be certified at the gold level for sustainable design by the U.S. Green Building Council (see article on pages 8-9).

# Energy Efficiency and Conservation Block Grant to Help Michigan Communities "Go Green"

#### By Arnold Weinfeld

The Energy Independence and Security Act of 2007, which President Bush signed into law in December 2007, contained a new funding opportunity for Michigan communities. The \$10 billion Energy Efficiency and Conservation Block Grant program will provide federal funding for innovative practices to improve energy efficiency, lower energy usage, and reduce fossil fuel emissions.

#### Funding Distribution and Eligibility

Of the appropriated grant amount, 68 percent is designated for local governments (cities and counties), 28 percent for states, 2 percent for Indian tribes, and 2 percent for competitive grants to local governments that are not eligible based on population or to a consortia of local governments.

Municipalities with a population of at least 35,000 are eligible for formula grants, which will be based on such factors as day and night populations and square footage of commercial, office, and industrial space etc., as determined by the Secretary of Energy. Each state is required to pass at least 60 percent of its funding share to cities and counties that do not receive direct formula funding. Each state will decide how to award these funds among cities and counties.

#### **Eligible Activities**

First-year funding can be used for strategy development; subsequent year funds must be used for strategy implementation. Grant funds can be used for:

- Developing and implementing an energy efficiency and conservation strategy
- Retaining technical consultant services
- Conducting residential and commercial building energy audits
- Establishing financial incentive programs for energy efficiency improvements
- Energy efficiency retrofits
- Developing and implementing programs to conserve energy used in transportation (e.g. satellite work centers, bike lanes, pathways and pedestrian walkways)

- Developing and implementing building codes and inspection services to promote building energy efficiency
- Implementing energy distribution technologies
- Developing and implementing programs to increase participation and efficiency in recycling
- Technologies to reduce and capture methane and other greenhouse gases
- Replacing traffic signals and street lighting with energy efficient lighting technologies
- Onsite renewable energy technology such as solar and wind energy, fuel cells, and biomass
- Other activities determined by the Secretary of Energy

While the law authorizes \$10 billion (\$2 billion per year for fiscal years 2008 through 2012), the money needs to be appropriated by Congress each year as part of the Federal budget process. In the Omnibus appropriations bill for FY 2008, no money was appropriated. The League is working in conjunction with the National League of Cities to secure appropriation of the full authorized amount as quickly as possible.

As critical moments and votes in Congress approach in this process, we will be calling on you to contact your congressional representatives. Together we can ensure that cities across the state receive funding and are able to begin or continue initiatives to conserve energy and protect the environment.

Many Michigan communities are already innovators in implementing energy conservation and environmental protection programs. The block grant program will allow local officials to continue these important programs and provides flexibility to tailor initiatives to their needs.

The sooner local officials can begin energy efficiency and conservation programs, the sooner we will reap the benefits of reduced energy costs, freeing up valuable tax-payer dollars for other programs.

Arnold Weinfeld is director of Public Policy & Federal Affairs for the League. You may reach him at 517-908-0304 or aweinfeld@mml.org.



"Next, I will ask this Legislature to set ambitious goals or our state, so that within eight years, a minimum of 10 percent of our energy will come from renewable sources. And we will double that goal in the decade after that."

Governor Jennifer Granholm,
 2007 State of the State Address

"Anything less than 15 percent renewables by 2015 sells our state short. We need to transition to the new economy now, not later. Renewable energy will be a huge contributor to economic activity, and it is a sustainable triple-bottom-line home run."

 Urban Core Mayor Co-Chair George Heartwell, Grand Rapids

It seems like these days it is the hip thing to do—talk about green energy. But for Michigan, it is serious business. Consider the following:

- Requiring state-regulated utilities to provide 20
  percent of their power from renewable sources could
  add \$64.6 million annually to the state's economy
  (University of Michigan Center for Sustainable
  Systems 2007 study).
- Consumers Energy's Balance Energy Initiative will provide an investment of \$2 billion or more to upgrade the state's energy infrastructure for green energy.
- The Granholm Administration is targeting \$50 million to the research, development, and commercialization of alternative and renewable energy projects in the state.

And today in Lansing, the push for bringing alternative energy to Michigan has never been so fierce—just ask members of the House Energy and Technology Committee.

In January 2007, the Michigan Public Service Commission (MPSC) released "Michigan's twenty-first Century Electric Energy Plan" report, the first attempt in 20 years to provide the backbone for growing Michigan's twenty-first century economy by "enhancing the state's ability to power itself through the use of renewable resource ..." It points out that Michigan's peak electric demand is forecasted to grow at approximately 1.2 percent per year over the next 20 years and, "At this rate, and given the long lead-time necessary for major plant additions, additional baseload generation is projected to be necessary as soon as practicable, but no later than 2015." In other words, we're going to need more power soon.

The report suggests one way to increase our energy supply is to implement a renewable portfolio standard (RPS). RPS is a rule that requires a minimum percentage of power to be generated from renewable sources (like wind and power). The Michigan Legislature is looking at this closely, partially because we are one of 26 states without a RPS standard. And if they implement a RPS, it is almost guaranteed that Michigan will reap the economic benefits that come with it.

SB 947, introduced by Sen. Bruce Patterson (R-Canton) in December, would implement RPS in Michigan. More specifically, it would require renewable energy, by 2016, to constitute at least 10 percent of the electricity that a provider sells to Michigan retail customers. In addition, it will create a "Renewable Energy Fund" that would be used by the PSC to promote and grow renewable energy projects in Michigan.

Local units interested in building large energy generators may want to keep an eye on how the debates on RPS progress this year. As always, the League will proactively be monitoring the situation and keep you informed.

David Worthams is a legislative associate for the League. You may reach him at 517-908-0303 or dworthams@mml.org.

## Renewable Energy and Local Control

By Samantha Jones



Alternative energy is all the rage nationwide, and Michigan is no exception. One of the key points to the governor's economic plan includes attracting alternative energy jobs to the state, and the Michigan Legislature is crafting a package of energy bills that would require the state to use 10 percent renewable energy by 2015 (see preceding article).

Studies by Michigan State University, the U.S. Department of Energy, and the State Energy Office of Michigan show a great propensity for wind energy in Michigan, particularly along the Great Lakes coastlines. Michigan ranks 14th nationally in wind energy potential, with utility scale wind turbines in Mackinaw City and Traverse City. There is a lot of buzz about erecting additional wind turbines, particularly along Lake Michigan. A lot of the wind turbine construction hinges on the passage of the legislative package that would require a renewable portfolio standard (RPS). If a 10 percent RPS is required by 2015, it would compel the major energy companies to build wind turbines to meet the standard.

In 2005, the Michigan Energy Office released siting guidelines for wind energy systems designed to help local officials balance the need for clean, efficient energy with local control. The model guidelines address issues like setback requirements and noise levels. Municipalities have the ability to adopt these guidelines for their own edification or they may create a policy of their own. It is important to note that if a municipality decides to create guidelines addressing siting, it is done in a way that addresses each individual municipality's concerns.

With all the excitement surrounding renewable energy, there is one important message to keep in mind: local control. It's not that anyone forgets the mantra of Michigan's communities, but it may get lost in the press and the overall excitement generated by renewable energy. It's vital for the state to continue to recognize and balance the importance of "going green" while maintaining the

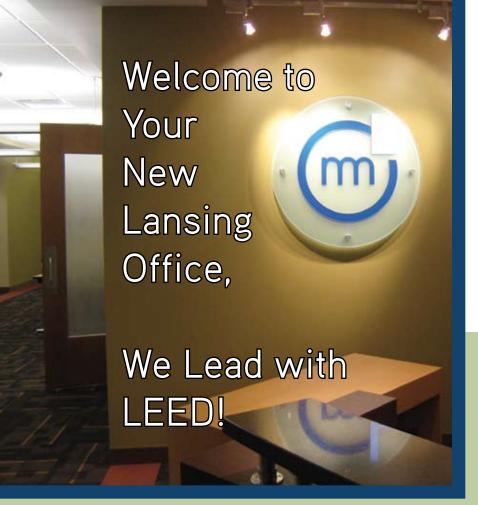
fundamental principle of local control. The energy package in the Michigan House does not address zoning and siting issues in its RPS mandate, and it's important that the Legislature continues to recognize the significance of local control in the energy debate. The major concern is that if a RPS mandate is passed, the legislature will pre-empt local control by creating zoning rules that take away the local's power to reject a project that contradicts what is best for the community. The League continues to monitor the energy package closely and will continue to stress the importance of local control in the energy debate.

It is critical for local government communities to emphasize that energy decisions remain at the local level.

Contact your legislators and members of the House and Senate Energy and Technology committees to encourage them to maintain local control as part of the energy discussion. As we're seeing communities embrace renewable energy, each city is doing so in a way that best meets the needs of its citizens.

Michigan communities are stepping up to the plate and embracing renewable energy. This year the city of Grand Rapids secured 20 percent of its municipal power from renewable sources. This includes purchasing green power from Consumers Energy, reducing municipal energy consumption by 10 percent, and inserting energyefficient building standards into the city's building code. In addition, they introduced hybrid buses to the public transit fleet, and are in the process of switching out municipal lighting to more energy efficient light emitting diodes (or LEDs). LEDs produce more light per watt and have longer lives than incandescent bulbs. Another goal is the generation of wind power—they have been working with Cascade Engineering Company to develop and market wind turbines for home and commercial use and are also exploring the use of small wind turbines to add renewable power downtown.

Samantha Jones is a legislative associate for the League. You may reach her at 517-908-0306 or siones@mml.org.



The League's new Capital Office reflects the importance of our advocacy efforts and our belief that communities are at the core of the economic turnaround in Michigan. Our new offices are now located on the first floor of a restored historic building in downtown Lansing, a stone's throw away from the Capitol. Using historic preservation, sustainable design and construction, and urban revitalization, the Christman development team breathed new life into a building that had fallen into a state of disrepair. The League's Workers' Compensation Fund and Liability & Property Pool provided the necessary funding to purchase and renovate this inspiring space in the Christman Building.

Listed on the National Register of Historic Places, the building is an example of sustainable "green" historic preservation, and is on track to become LEED (Leadership in Energy and Environmental Design) certified by the U.S. Green Building Council. Green features of the project are many, including water use reduction by water-efficient fixtures and plumbing, optimized energy performance in lighting, and heating and cooling

systems, construction waste management in which 70 percent of all construction waste was reclaimed and recycled, thereby diverting it from landfills, and a focus on daylighting, with an interior design that provides outdoor views to 90 percent of occupants.



The Historic Corridor, located at the front of the offices, showcases the original tile and woodwork that have been painstakingly restored to recapture the historic character of the building. The Corridor separates several beautifully restored rich walnut-paneled boardrooms from the newly added contemporary office, training, and reception areas. "Many do not realize the strong, symbiotic relationship between state-level incentives for historic preservation and the overall economic development of our State," said Sandra Clark, director of the Michigan Historical Center. "The rehabilitation of the Mutual Building into a thriving, corporate office headquarters for The Christman Company, is a true 'best practices' case study in adaptive reuse of our precious historic resources and keeping our state working."

Left Page: The new League Capital Office under construction. Right Page: The completed space: an inviting blend of history and innovation.

"There is a strong sense of dignity, a civic presence here that we can all appreciate," said the League's executive director Dan Gilmartin, "with the added contemporary design, this office speaks volumes for this organization and is very symbolic of our history as a League--we value tradition, but constantly seek innovation."

Other aspects of the building that are of note are the addition of a sixth floor, which features a conference room and patio that offer a panoramic view of the stately grounds of the Capitol, and the transformation of the basement's former basketball court into a state of the art training facility.

The entire Capital Office was designed with you, our members, in mind. Member communities and affiliate groups will be using the space for meetings with legislators and retreats. So whether you just want to shoot the breeze with staff or need a place to hang your hat for a few hours, please, be our guest when you are in Lansing!





#### A Win-Win Solution

The 2006-2007 Michigan Municipal League Liability & Property Pool Board of Directors and Workers' Compensation Fund Board of Trustees each recognized the value of partnering with the League to provide premiere office space and training facilities in Lansing for the use of the entire League family.

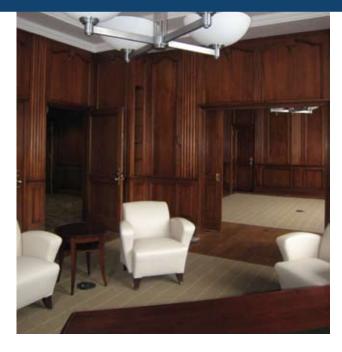
The Workers' Compensation Fund and the Liability & Property Pool provided the necessary funding to purchase and renovate this inspiring space in The Christman Building, formerly known as the Mutual Building. In exchange, the insurance programs obtained a tangible asset that enables them, in partnership with the League, to better serve their members through advocacy and training.

The League is honored to have been a part of the public/private partnership that restored the building to its former glory so that it may be put to good use by future generations.

#### What is LEED? LEED/Green Buildings

The U.S. Green Buildings Council (USGBC) advocates using technological advances in building to design, build, and operate structures that maximize both economic and environmental performance. USGBC developed its Leadership in Energy and Environmental Design (LEED) standards for constructing and certifying sustainable buildings in the year 2000. A state and local government toolkit was published by the Council in November of 2002. Cities, states, and the federal government use LEED as the primary green building rating system.

Building "green" means incorporating appropriate materials (natural insulators, energy efficient glass), increasing the access to daylight for interior spaces, reducing water consumption, and investing in heating and cooling systems that help reduce the building's "carbon footprint" and deliver cleaner air quality for the people working or living within the structure.







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# Green Roof: East Grand Rapids Community Center

By Karen Brower

ast Grand Rapids installed a green roof at their Community Center primarily to waterproof the top of an abandoned water reservoir behind the municipal buildings to allow expansions of the Public Safety and Parks & Recreation Departments into the spaces underneath the decking. The secondary benefits include a beautiful plaza for community use, lower energy costs for heating and cooling the buildings below, reclaiming materials destined for landfills by recycling the tires into paving tiles, and reducing the amount of stormwater runoff draining into Reeds Lake during rain events.

With the completion of the new Community Center in August 2006, the city now utilizes Wege Plaza (as the roof area is named) as an urban park where citizens come to enjoy the lakefront and various events. Wege Plaza can be rented for weddings, graduation parties, and other events, and is available for concerts, fourth of July fireworks viewing, and outdoor classroom activities. Visiting middle school science classes learn about environmental issues such as stormwater and ecology, and the Sedum plants on the green roof were planted by a group of elementary students as part of a class project.

#### What Is Green Roof?

"Green roof" is a simplified term for waterproofing and beautifying rooftop areas with grasses and/or plant materials. Variations of green roof systems include layers of insulation, waterproof membranes, root barriers, soil retention mats, drainage mats, or specialized soil mixes and plants.

The East Grand Rapids Community Center is a LEED (Leadership in Energy and Environmental Design) Silver certified facility featuring recycled and renewable building materials, low-maintenance landscaping, a storm-water filtration chamber, low-use plumbing, electrical and mechanical systems, solar panels, and other methods of environmental stewardship. The city has hosted informational tours of the green roof and other aspects of the LEED facility.

#### **Quick Facts**

- The green roof covers 8,256 square feet of area.
- Approximately 12,000 tires were recycled to create the 3,500 terra-cotta colored paving tiles.
- Approximately 8,200 plants made up of nine different species of Sedum groundcover occupy the planting beds.



Above: Aerial view over Reeds Lake

- The soil mixture is 65 percent expanded slate, 20 percent sand and 15 percent compost.
- The planted area of the roof retains 50-75 percent of rainfall (about 2,500-3,800 gallons of stormwater during a 1" rainfall). Much of the remaining water entering Reeds Lake is filtered through the natural soil of the planted areas, removing many pollutants found in stormwater.
- Studies have shown green roofs reduce the energy usage of covered buildings by up to 75 percent. On a 95 degrees F summer day, typical asphalt roofs can reach temperatures of 150 degrees F, while a green roof maintains a temperature of only 75 degrees, lowering the building's cooling requirements.
- The roof will improve the air quality by absorbing carbon dioxide, replacing oxygen in the atmosphere, and creating a cooling effect on downwind areas.
- The cost of the entire roofing system was \$325,000.
   The Wege Foundation donated \$200,000 for the project; the remaining costs were paid by the city of East Grand Rapids. The plaza was constructed in late 2003 and the plantings were installed in early 2004.

Karen Brower is the city clerk for the city of East Grand Rapids. You may contact her at 616-949-2110 or kbrower@eastgr.org.

## What Should a Community Do to Become Green?



Does new development disturb a minimum amount of land?

Are locally produced materials used in construction?

Are construction materials derived from previously used materials?

Are materials that could be used in other products separated from solid waste?

appropriate food waste?

Does your community encourage selfcontained treatment of human waste?

Does your community educate citizens on passive and active solar power approaches and encourage their use through its building department?

mass transit, or others

Is new development

Is new development

of a density that

supports urban

services?

in the community?

located close to transportation nodes? Does your community encourage the generation and use of renewable power sources, such as wind?

Does your community encourage the use of xeriscaping (landscaping that lowers the requirement for water through the use of native and lowwater consumption plants and other techniques)?

Does your community require the onsite management of storm water?

Does your community promote the reduction of impervious surfaces, including the use of porous paving, sharing parking, reducing parking requirements and reducing road width requirements?

Is your community covered by an erosion and sedimentation control ordinance and is it adequately enforced?

Does your planning department or building department help property owners plan landscapes to reduce heat islands and to help cool buildings naturally?

Does your building department encourage the use of energy saving construction techniques, such as increased insulation, smaller heating and cooling equipment and increased use of daylight?

Does your building department help educate citizens and builders on the benefits and use of low-emitting materials? (Materials that produce gases or small particles that can contribute to poor indoor air quality and Sick Building Syndrome.)

Does your building department encourage the use of certified wood or construction using rapidly renewable materials?

Does your community promote the reduction of light pollution?

Does your community provide opportunities for proper hazardous waste disposal and help educate citizens on alternatives to the use of hazardous materials?

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Does your planning department or do other local officials encourage the reuse of existing buildings?

Does your community inventory its natural resources and natural features so it can plan for their sustained use?

Does your community educate its youth about the goals of the community and the concept and tools for sustainability?

Does your community involve faithbased, service and other organizations in planning for the future of the community?

Does your community involve atrisk youth or groups and individuals or groups with limited social capital in planning for the future of the community?

Does your community involve faithbased, service and other organizations in implementing sustainability strategies?

Does your community provide educational opportunities on sustainability to newcomers?

Does your community encourage the arts and cultural programs and events?

Does your community encourage entrepreneurship?

Does your community encourage the local production of food?

Does your community future land use plan allow for businesses or industries that could utilize each other's wastes or products to locate adjacent to each other?

Does your community comprehensive plan and zoning ordinance promote mixed use where appropriate?

Does your community comprehensive plan and zoning ordinance promote walking?

Does your community comprehensive plan and zoning ordinance or other planning and zoning elements promote the inclusion or protection of natural elements in new development?

Does your community government and your local schools have green purchasing programs?

Does your community measure community well-being?

Does your community understand the fiscal relationship between the services it provides and its pattern of development? Is the community's attitude that it will plan for its future in order to balance the cost of services it provides with how it grows?

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## If You Act GREEN,

By David Lossing



If you work to implement strategies on environmental sustainability, can you save taxpayer money, promote the environment, and protect it for the next generation?

I think so. The city of Linden created its first "Linden Green Team" earlier this year. The purpose is to look into strategies to improve the environmental impact of our operations and encourage our residents and business owners to change their behaviors.

#### Assembling the Green Team

Our city council appointed residents and students from different walks of life to look into this issue. This committee is not a stand-alone or meant to work as a silo-type effort. We purposely appointed some individuals who also serve on other city committees, such as the planning beautification and commissions, along with three high school students from the Linden and Lake Fenton School Districts. I expect these young people to be part of the next generation of leaders that we will all depend on. Linden is giving them an opportunity to make a difference today.

#### What issues should they work on?

During the first Green Team meeting, I suggested three potential concepts:

#### Flex Fuel police cruiser

With the rising cost of gasoline, doesn't it make sense to help break the dependence on foreign oil? If so, how do we do it? One option is to purchase police cruisers that run on "flex fuel" or E85 fuel—a combination of 85 percent corn-based fuel mixed with 15 percent gasoline. In Genesee County, there is only one gas station that currently sells E85; so, if we decide to move in this direction, it would make sense to work with our local gasoline stations and partner with them to begin selling E85 fuel. The city creates the demand for the fuel, and the local owners create a supply. A win/win for everyone.

#### Low flush toilets

Linden, like many other municipalities in the state, sells water and sewer services to residents and businesses. Could we influence a behavior change in customer water

consumption if we created an incentive to save on their water and/or sewer bill each quarter? What if we gave them a one time or multi-year credit on either the water or sewer bill for installing a low flush toilet? Would they do it? If they can save on their bills, use less water and receive a local credit, who wouldn't? In the end, we are preserving a natural resource for future residents and businesses alike.

#### LED light bulbs

Let residents know how they can save money, instantly, on their monthly energy bill, and how the city can help. First off, replace all of the incandescent light bulbs in homes with comparable LED light bulbs. A typical 60-watt incandescent bulb costs about 70 cents and only lasts for about 1,000 hours. A typical 60-watt LED bulb costs about \$34 and will last for 60,000 hours—you would need sixty 60-watt incandescent bulbs to match one 60-watt LED light bulb for the same 60,000 hours of use. The cost to run incandescent vs. LED is staggering. The cost of electricity to power the sixty 60-watt bulbs cost about \$360 for a 60,000-hour life span compared to just \$12 for the LED version.

#### MiDeal

Linden (or your community) can join the State's MiDeal purchasing program and phase in an approach to assist residents and business owners who want to save on their energy consumption. Let's say the city buys 1,000 LED bulbs. We then sign up residents who want to participate and agree that in exchange for an exact number of LED bulbs, they either pay the reduced price the city paid for the LED bulbs upfront, or agree to have that cost placed on their summer tax bill spread over a two or three year plan. With the latter, we are able to sign up even more customers in the second year because now we created a revolving fund to purchase LED bulbs next year and beyond. Residents and business owners realize an instant savings on their energy bill within the next month.

So, you can save some "GREEN" by acting "GREEN." And that's coming from a University of Michigan-Flint graduate!

David Lossing is mayor of the city of Linden. You may contact him at dlossing@lindenmi.us.

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## When Being Audited Is a Good Thing: Reduce Your Energy Costs and Improve the Environment

By Ryan Cotton

Il an energy audit entails is asking your heating and air Aconditioning contractor or electrician to tweak your building HVAC systems to be as efficient as possible. It is that simple. A professional who is up on the latest technology, reviews options with you as the owner to make energy-saving improvements. Don't worry about whether it will be worth the additional cost—most options save money in the long term; all options reduce greenhouse gases.

After our energy audit and improvements to our system, energy costs dropped by 20 percent at Spring Lake's village hall (which doubles as the Spring Lake/Ferrysburg Police Department on a 24/7 basis). These savings paid for the costs of improvements within six months. The total savings was \$7,500 per year. The cost of the added HVAC controls totalled \$3,500. The new timers and dampers enabled significant refinements in how much new air was required,

depending on the time of day and the building's occupancy. The building also employs the most efficient lighting available and uses motion-activation and timer technology as much as possible.

If you are not sure who to call for an energy audit, contact the Michigan Alternative & Renewable Energy Center at 231-722-4371, or Dave Sousa of Grand Valley Automation at dsousa@gvainc.com, or contact the state agency responsible for energy conservation. Being environmentally conscious in other ways can reduce your cost even further and lead to a safer, more active and vibrant, walkable community.

See the Top 10 Tips to accomplish a three-part bottom line:

- 1) Reduce cost.
- 2) Improve the environment, and
- 3) Enhance your community.





At the request of the editor of *The Review*, Ryan Cotton submitted this photo of his hybrid car. Not only does Ryan bring an environmental consciousness to his professional duties as a village manager, but he also practices it on a daily level. Ryan notes that "this hybrid sedan gets 43 mpg on average and 50 mpg in summer. And, it exhausts half the greenhouse gases of comparable vehicles."

(left) Bill Filber President, village of Spring Lake

(right) Ryan Cotton Manager, village of Spring Lake

Ryan Cotton is the manager for the village of Spring Lake. You may reach Ryan at: 616-842-1393 or ryan@springlakevillage.org.

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## Top 10 Things We Can Do as Public Officials to Conserve Energy

By Ryan Cotton

It is all about what fuel we burn/save, what we drive, and fostering our community's 'Quality of Life'.

- 1. Buy new technology. Be climate friendly. Buy ENERGY STAR copiers and appliances. Buy recycled products that take less energy to produce.
- 2. Foster a conscientious culture. Turn off lights...it is a myth that more energy is needed to turn them on again. Buy energy-efficient bulbs.
- 3. Unplug and turn off unused electronics. Chargers, monitors, and computers use energy when plugged in, even when not in use.
- 4. Plant more trees. Double what is removed. One tree is needed per cross-country flight to soak up jet fuel carbon. Offer to accept tree donations. Put this offer in newsletters for those who want to be carbon neutral.

- Bid the most energy efficient boiler/heater designs and insist on the most energy efficient operating procedures. Adjust the thermostat down. Consider a green roof. Do not be dissuaded by cost...payback is substantial.
- 6. Support the Safe Routes to School Program and do walking audits of your neighborhoods.
- 7. Create a No-Idle culture, except squad cars in winter.
- 8. Purchase hybrid and alternative fuel vehicles. Avoid old technology that creates more greenhouse gases per mile.
- Become a more walkable community. Encourage walking/biking to work and school on Earth Day (and every day).
- 10. Contract for energy audits and implement the recommendations (six month paybacks proven).





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For registration form, contact Judy Thomson-Torosian, MIPRIMA Program Chair, at jthomson@meadowbrook.com or (248) 204-6137

The Donald P. Althoff Scholarship Golf Outing will be held June 10, 2008 at Lyon Oaks Golf Course. If you are interested, please e-mail Stephen Cooperrider, Risk Manager, City of Troy, at cooperrisl@troymi.gov



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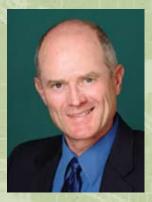
Green Building Report - The Conservation Fund - Ann Arbor Non-Motorized Transportation Plan - Michigan Urban Core Mayors Renewable Energy Resolution - Greening Your Office and Saving Money - U.S. Department of Energy "Energy Saving Tips" - U.S. Green Building Council Toolkit for State and Local Governments - MSU Land Policy Institute Comprehensive Study on Economic Valuation, Economic Impact Assessment, and State Conservation Funding of Green Infrastructure Assets in Michigan - The Conservation Fund Green Infrastructure: Smart Conservation Technology for the 21st Century - Case Study Saginaw Bay Greenways Collaborative - Alliance to Save Energy The Power is in Your Hands: Save Energy/Save Money/Save the Planet - Ann Arbor Green Fleets Policy - Lansing Go Green! Business Pledge - Michigan Department of Natural Resources: More Communities Seeking Tree City USA Designation - Michigan Urban Core Mayors Renewable Energy Resolution - Lansing Go Green! Persona Wind Wait?

# Plug into the League

## Ann Arbor Goes Green

#### By Jeanette Westhead

Ann Arbor has a long history of paying attention to environmental matters and working towards sustainability. Promoting conservation and renewable energy has been a major tenet of Mayor John Hieftje's administration since he became mayor in 2000. He attributes his background as an environmental activist as one of the reasons he was elected.



In September, 2005, Mayor Hieftje issued a Green Energy Challenge, calling on the city's Energy Commission to investigate how Ann Arbor might

use 20 percent green energy by 2010 for municipal operations and by 2015 for the whole community. After the Energy Commission reported to council on a way to achieve 30 percent green energy, Mayor Hieftje raised the goal for municipal operations to 30 percent by 2010. On May 1, 2006, the city council unanimously passed a resolution formally adopting the following goals:

- 30 percent renewable energy for municipal operations by 2010;
- 20 percent renewable energy by 2015 for the Ann Arbor community; and a
- 20 percent reduction from 2000 greenhouse gas emission levels by 2015 for the Ann Arbor community.

While the Energy Commission works with the community to achieve these challenging goals, a surprising benefit to the community is that many of Ann Arbor's environmental programs are saving its taxpayers money. After

successfully piloting light-emitting diodes (LED lights) on a downtown block, the city obtained a \$630,000 grant from the Ann Arbor Downtown Development Authority to implement a full conversion of over 1,400 downtown streetlights. The LEDs will cut energy use in half and reduce maintenance costs as the bulbs typically last five times longer than traditional lights. The city is expecting annual savings of more than \$100,000 in reduced power costs and 294 tons fewer carbon-dioxide emissions.

#### Non-Motorized Transportation Plan

In 2007, Ann Arbor adopted a comprehensive non-motorized transportation plan calling for 56 total miles of bike lanes along half of the city's primary roads. Bike lanes, the striped and stenciled lanes for one-way bicycle travel on roadways, make it easier for people to commute by bike. In addition, the city is working as part of a coalition of planning and recreation agencies throughout Washtenaw County to develop the Huron River Greenway Border to Border Trail, 35 miles of shared-use paths, and bicycle lanes across the county. Ann Arbor buses even have bicycle racks, creating opportunities for bikers to use mass transit for part of their commute.

#### Biodiesel and Hybrid Electric Buses

The Ann Arbor Transportation Authority (AATA) is an important player in the city's goal to go green. In 2002, AATA converted its fleet to ultra low sulfur diesel fuel; and in 2006, a blend of 5 percent biodiesel with ultra-low sulfur. In this ongoing effort to create a cleaner environment, AATA is currently testing a blend of 10 percent biodiesel with ultra low sulfur fuel. In October 2007, fifteen buses were replaced with hybrid electric buses. In March 2008, an additional five buses were replaced in an ongoing effort to reduce greenhouse gas emissions. The hybrid buses reduce fuel consumption by approximately 30 percent and lower maintenance costs by 30 to 50 percent when compared to traditional diesel buses. With twenty converted buses, AATA expects to save 811,200 gallons of fuel and close to \$2.5 million over the buses' twelve-year life expectancy. Seven more buses will be replaced within the next eighteen months, and the remaining buses in the fleet will be replaced with hybrids as they reach their life expectancy.

#### Parks and Greenbelts Program

In 2003, when the city's unusual mix of urban areas, working farms, and natural places was threatened by urban sprawl, Ann Arbor voters took a stand to protect their sense of place. They approved a



millage of one-half mill over thirty years to establish the Parks and Greenbelt program, which provides funding to buy parkland within the city and conservation easements on private lands outside the city borders. The program preserves Ann Arbor's environment by balancing the need for development with the need to protect natural habitats, open spaces, and city source waters.

This article has covered a few of the programs that identify Ann Arbor as a national leader in environmental sustainability (see the sidebars for detailed listings of the city's current environmental awards and programs). What may not be so easy to see is the impact that the environmental programs are having on the economic health of the city. It is the environmental policies and natural spaces that are attracting high-tech, knowledge, and life sciences businesses that are essential to economic vitality in today's world.

"Our people care about the environment, and people in elected office care about the environment, it infuses the whole city." -Mayor Hieftje

To hear a podcast interview with Mayor Hieftje about Ann Arbor's green initiatives and how other communities can go green, visit www.mml.org.

#### **DID YOU KNOW?**

To produce each week's Sunday newspapers, 500,000 trees must be cut down. Recycling a single run of the Sunday *New York Times* would save 75,000 trees.

## Recent Key Policies, Ordinances, and Plans That Guide Ann Arbor's Sustainable Practices

2007 • Manufactured Fertilizer Ordinance went into effect

• Flood Mitigation Plan adopted

2006 • Manufactured Fertilizer Ordinance approved

• Environmental Commission developed and city council adopted Environmental Action Plan Guiding Principles and Goals

• 5,000 Solar Roofs Initiative created

2005 • Mayor Hieftje issued his Energy Challenge

2004 • 2004 State of Our Environment Report Released

• Green Fleets program initiated to reduce fuel use

 Open Space and Parkland Preservation millage approved (Parks and Greenbelt Ballot Proposal)

2002 • Brownfields—City joins the Washtenaw County Brownfield Redevelopment Authority

• Solid Waste Plan updated for 2002-2007

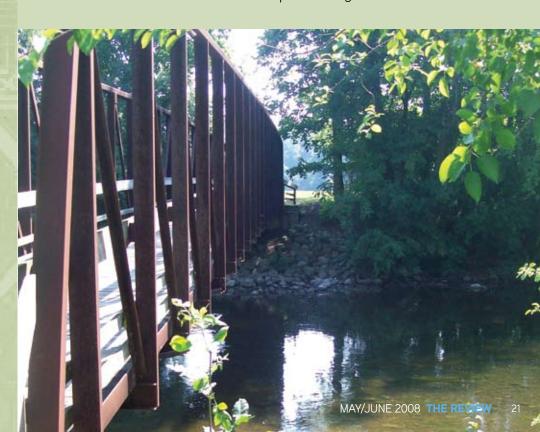
2001 • Environmental Commission created as a Chapter in City Code

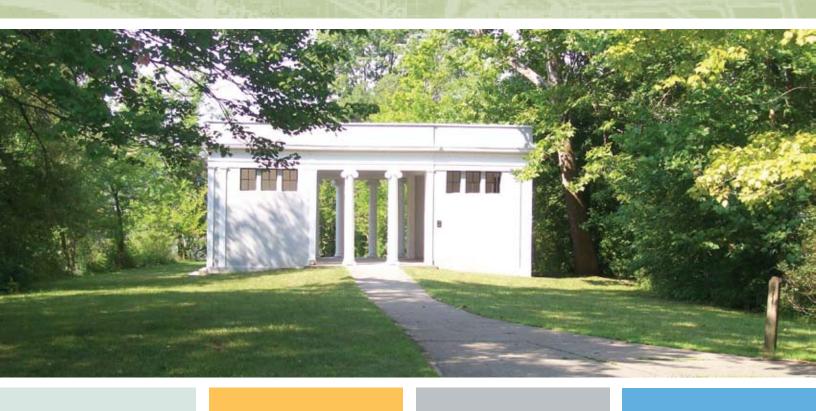
• Park Maintenance and Restoration millage

 Park Rehabilitation and Development millage renewed for 6 years

 Ann Arbor is recognized by the U.S. Environmental Protection Agency as having one of the top twenty waste reduction programs in North America

Park Rehabilitation and Development millage





## Awards Recognizing Ann Arbor's Leadership in Environmental Sustainability

The City of Ann Arbor has been recognized as a leader in environmental sustainability by a number of national organizations that presented the city with the following awards:

America's 50 Greenest Cities (2008), *Popular Science* 

Best Walking Cities, 3rd place (2008), *Prevention Magazine* and the American Podiatric Medical Association

Climate Innovation Invitational Award (2007), International Council for Local Environmental Initiatives (ICLEI)—Local Governments for Sustainability

Promoting Active Communities Gold Award (2006), The Governor's Council on Physical Fitness, Health and Sports Top 21 Cities for Cyclists (2006), *Bicycling Magazine* 

Outstanding Planning Project Award to the city of Ann Arbor's 2006 Northeast Area Plan (2006), Michigan Association of Planning Model Waste Reduction Program of North America (1999), U.S. Environmental Protection Agency



Jeanette Westhead is research writer for the League. You may reach her at 734-669-6318 or jwesthead@mml.org.

## The A. Alfred Taubman Student Services Center at Lawrence Technological University By Anne Adamus

The 42,000-square-foot Taubman Center is a "living laboratory" of sustainable design and engineering. Built to U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) specifications, the Taubman Student Services Center addresses the criteria of sustainable site development and construction, water and energy efficiency, recycled materials selection, and indoor environmental quality.

Over 60 percent of the Green Roof is vegetated. The building's 10,000-square-foot living green roof is created with layers of insulation, roof membrane, drainage fabric, and a four-inch granular composition supporting the planting of nine different species of sedum ground cover. About nine inches thick, the roof offers more effective insulation than traditional roofs, and expands and contracts with seasonal changes. It is expected to last about 40 years, more than twice the lifespan of traditional materials.

The green roof also controls and reduces water runoff. With normal

rainfall, about 60 percent of the water will be absorbed by the roof while the remainder drains into a 10,000-gallon cistern to be used as "gray" water for flushing toilets and the irrigation of the campus quadrangle. A system of weirs, tile fields (composed of material made of volcanic ash), and long-rooted grasses and trees will prevent 60 percent of the rainwater that falls on the adjacent campus quadrangle from running into the Rouge River as part of a regional effort to control storm water drainage and improve the water quality and biodiversity of this portion of the Rouge watershed.

The most complex and sustainable aspect of the Taubman Center cannot be seen: a field of 88 geothermal wells sunk 300 feet through five geological layers under the campus quad. A system of polyethylene tubing, pumps, and fans connected to the wells utilizes water to heat and cool the building, which has no boiler, furnace, or even a gas meter. Water never leaves the tubes in the closed loop system, which transfers heat to and from the earth as needed to meet the building's cooling or heating needs.



Lighting in the Taubman Center is controlled by sensors and astronomically-synchronized timers that adjust three minutes a day to accommodate seasonal lighting needs. The heating and cooling system is controlled by a digital system, which continually monitors approximately 1,700 points throughout the building and sends signals to various valves and dampers that adjust to the demands within the building. Many of the heating, ventilation, and air conditioning controls and mechanisms are visible for study by students.

#### ALOeTERRA House Rises Again!

With help from the Troy Chamber of Commerce and partial federal funding championed by U.S. Rep. Joseph Knollenberg, the city of Troy acquired the zero-energy, solar-powered house that Lawrence Tech students built for last fall's Solar Decathlon competition in Washington, D.C. Troy city officials plan to use the house for a public education campaign to promote energy conservation and sustainability principles. The house is scheduled to reopen in June.

Anne Adamus is manager, university communications and academic editor for Lawrence Technological Institute. You may reach her at 248-204-2208 or adamus@ltu.edu.



## Rain Gardens: City of Lansing

Reported by Kim Cekola



Mayor Virg Bernero (right) dedicates the completion of Lansing's Michigan Ave. Rain Gardens.

The rain gardens along Michigan
Avenue are not just beautiful, they
also help protect our rivers. How
is this possible? The gardens are
actually engineered bioretention areas
(commonly known as rain gardens)
that can help remove pollutants from
stormwater before it is released to
the river. Stormwater easily picks
up contaminants such as sediment,
automotive fluids, fertilizer, and debris
as it travels over streets and sidewalks.
This polluted runoff typically enters
the storm sewer system, which drains
directly to our rivers without treatment.

This project directs stormwater flows on Michigan Avenue to the rain gardens, where native plants and engineered soil absorb pollutants. The treated stormwater that is not absorbed by the plants will be discharged to the river through a drain that runs under the gardens.

The rain gardens were constructed in conjunction with sewer separation work and provide streetscape beautification elements such as brick pavers, benches, and kiosks. Interpretive educational



#### What is a rain garden?

A rain garden is an attractive landscaping feature planted with perennial native plants. It is a bowl-shaped or saucer-shaped garden, designed to absorb stormwater runoff from impervious surfaces such as roofs and parking lots.

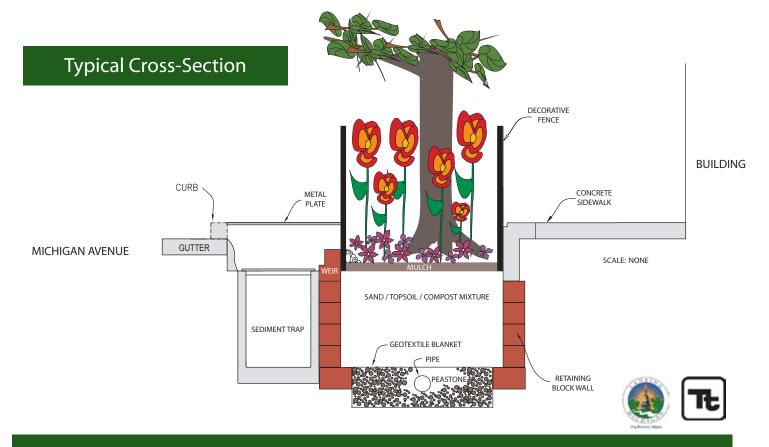
#### Why do we need rain gardens?

Rain is natural, but when it falls on a manmade surface picking up pollutants as it flows away, an unnatural condition is created. Government studies have shown that up to 70 percent of the pollution in our streams, rivers and lakes is carried there by stormwater. Although most people never think about stormwater, about half of the pollution that stormwater carries comes from things we do in our yards and gardens!

Keeping rain where it falls by promoting infiltration through the soil is a natural solution. Rain gardens can accomplish this and you not only get a lovely garden out of it, you have the added benefit of helping protect our rivers, streams and lakes from stormwater pollution.

#### How Did Rain Gardens Get Started?

Rain gardens, or bioretention systems, were first conceived of in 1990 by stormwater specialists in the state of Maryland. Source: Rain Gardens of West Michigan, www.raingardens.org.



## Michigan Avenue Bioretention Facilities

signage will be posted in the gardens, which will draw visitors from near and far interested in this urban solution to stormwater pollution.

As intriguing as these rain gardens are, everyone can easily prevent stormwater pollution. Here are three easy ways:

- never dump anything down a storm drain, 1)
- never fertilize before it rains, and
- wash your car at a commercial car wash or on your lawn.

Remember, only rain belongs in the storm drain!



For more information on Lansing's Rain Gardens visit: www.cityoflansingmi.com/pubserv/cso/michigan\_ ave\_rain\_gardens.jsp or contact Anne Thomas, water resource group leader for Tetra Tech. You may reach her at 517-899-0644 or anne.thomas@tetratech.com.



Kim Cekola is the research associate/publications editor for the League. You may reach her at 734-669-6321 or kcekola@mml.org.

## Geothermal Heating: Lake Isabella

By Timothy R. Wolff

This past September the village of Lake Isabella completed a much anticipated move into a new office building. Prior to the move, the village had been operating out of a rented office suite of less than 400 square feet. The new office building features 2,500 square feet of meeting and office space, and is located in the community's growing central business district.

The original building design called for a conventional air intake heating and cooling system. Councilmember Jeff Grey was a strong advocate of incorporating a geothermal system into the new building. Grey has been using a geothermal system in his home for several years and was able to convincingly show that the long-term cost savings he has enjoyed could also be realized by the village for the new building. Grey is not alone in using the technology in the Lake Isabella area. According to the local electric company, over 50 of the 900 homes in Lake Isabella are already using a geothermal heating and cooling system.

With the council's interest in the system, the village began to explore sources of funding to help cover the upgrade. The village did not have to look far—the local electric cooperative, Homeworks Tri-County, has been strongly pushing geothermal systems to help conserve energy use across its service area. Seeing the potential to use the new village hall as a showcase, Homeworks Tri-County awarded the village with a grant for \$3,500 to help cover the costs of installing a geothermal system. With the total cost to the village being only \$6,352 and the low bidder being a local company, McGuire Heating and Cooling, the council unanimously approved the change.

The village's system is what is known as an "open loop." Water is pumped from an onsite well into the system where the natural heat from the earth



is transferred from the water into the air that is forced through the ventilation ducts in the building. Once the heat from the water has been used, the water is then returned to the ground via an 800-gallon dry-well. In an open loop system, water is continuously taken from, and returned to, the ground. The process is essentially the same to heat or cool the building. The heat energy from the water is used to warm or cool the air being forced through the ventilation ducts prior to the air entering the furnace. Utilizing the thermal energy stored in the ground for heating and cooling is very efficient. The EPA estimates that by using a geothermal system, you will reduce your energy consumption for heating and cooling by 44 to 72 percent.

Former Location Electric Costs \$679.26 Former Location Heating Costs \$1,287.89 New Location Electric Costs \$227.02 New Location Heating Costs \$514.45

OLD Total Utilities: \$1,802.34 NEW Total Utilities: \$906.28

We noticed the budgetary impact of the system immediately. Since going online in mid-September, the village has spent a total of \$227 to heat and cool their building. Or, an average of less than \$46 per month with the thermostat set at a comfortable 70 degrees. The highest monthly bill to date was \$69 for the February billing cycle. During this same time period, the former office building, with only 1,500 total square feet of office space, spent \$1,288 in heating costs. The above table shows the costs from both locations from October 1, 2007 through February 29, 2008. At the current market rates for energy, the village expects to see a return on investment in less than five years.

The geothermal system was not the only energy saving measure utilized in the new office building. All exterior lighting is timed to only be on during key hours, low maintenance landscaping was used, ENERGY STAR light bulbs and office equipment are featured throughout the building, and blown cellulose insulation made primarily from recycled newspaper is found in all walls. With the village still experiencing over 20 new homes constructed annually, the new village hall is a showcase to the community, home builders, and prospective residents that green technology is more than adequate to meet individual home owner needs and significantly save them money in the long term.

Timothy Wolff is manager for the village of Lake Isabella. You may contact him at 989-644-8654 or trwolff@chartermi.net.

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IT'S THE PEOPLE

### Geothermal Heating: Coldwater

By Steven DiBerardine

The 30,000 square foot Henry L. Brown Municipal Building in Coldwater is heated and cooled by a geoexchange system. Although they are often simply referred to as geothermal systems, geoexchange heating and cooling systems should not be confused with the geothermal power plants in Western states that produce electricity from steam trapped deep below the earth. Geoexchange systems utilize the constant earth temperature as either a source of heat for space heating or heat rejection for cooling.

#### The system explained

The system at the Henry L. Brown Municipal Building consists of fifty vertical piping loops each inserted 300 feet into the earth. An environmentally friendly anti-freeze solution circulates through this network of pipes continuously to either carry heat to the building in the winter or carry heat away from the building in the summer. Inside the building there are twenty four ground source heat pumps that use a compressorized refrigeration cycle to drive the heat transfer to and from the anti-freeze solution. Outdoor ventilation air is delivered to the building during occupied times through two energy recovery ventilators located in the basement. With this system, the city has experienced significant energy saving for six years. The added cost of this energy efficient system has now been recovered through energy savings.

#### The most energy-efficient systems

Both the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) report that geoexchange systems are the most energy-efficient, environmentally clean and cost-effective options available for heating and cooling. The EPA also found that geoexchange systems offer the lowest carbon dioxide emissions and lowest overall environmental cost of all space-conditioning technology readily available today. The few emissions that are released occur at the power plant, where they are carefully monitored and controlled. In the heating mode, a geoexchange system can produce four units of heat energy for every unit of electrical energy consumed. The heat pumps essentially pull three units of heat from the ground using the refrigeration cycle resulting in 300 percent energy efficiency. In the cooling mode, geoexchange systems are about 30-40 percent more efficient than conventional cooling systems. The heat rejected to the earth in the summer time is available to help heat the building in the winter.

#### Combating natural gas prices

Geoexchange is not new-the technology has been around for decades. Rising natural gas prices over the last few years have made geoexchange systems an economically sound and environmentally responsible choice. Prior to 2000, natural

gas prices were relatively stable and inexpensive in Michigan when compared to other areas of the country. Since then natural gas prices in Michigan have more than doubled. It is estimated that Coldwater has been saving up to 60 percent on energy costs when compared to a conventional heating and cooling systems.



Coldwater's Henry L. Brown Municipal Building

#### Safe and clean

Geoexchange systems are safe and clean because there are no combustion flames, no flues, and no odors-just safe, reliable operation year after year. There is no natural gas service to the municipal building. These systems are also quiet with no rooftop equipment or noisy outdoor fans and compressors. Compared to conventional systems, geoexchange systems deliver constant comfort and improved humidity benefit. The geoexchange system in Coldwater was designed by Strategic Energy Solutions (SES) in Ferndale.

Steven DiBerardine, is a project engineer at Strategic Energy Solutions. You may reach Steven at 248-399-1900 or SteveD@sesnet.com.

#### **DID YOU KNOW?**

If every household in the U.S. reused one bag per grocery trip, it would save 10 billion plastic bags—

enough to fuel 50,000 cars for one year.



## Visit the League on-line at: www.mml.org

E-mail the League's inquiry service at info@mml.org for answers to questions on a vast array of municipal topics. Available materials include ordinances, policies, articles, programs, charter provisions and reference packets.

You may also call the League's Information Service at 800-653-2483 or 734-662-3246 or fax your questions to 734-663-4496.



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**Bulletin Board** 

By Kim Cekola

#### **Energy FYIs**

#### E-85 Stations in Michigan

The Ethanol Coalition of Michigan reported in its fall newsletter that the number of ethanol fueling stations in the U.S. had reached 1,300, up from 881 in 2006, and 514 in 2005. Minnesota leads the nation with 322 E-85 sites. Michigan is in eighth place, with 55 E-85 stations. For a complete listing of all E-85 fueling locations, visit www.E85refueling.com.

#### Reuse-A-Shoe Program

The city of Lansing has collected over 40,000 pounds of worn-out athletic shoes through Nike's Reuse-A-Shoe recycling program. The shoes are shipped to Nike's processing facility in Oregon, where they are turned into new sports surfaces. The city received a grant to install a rubberized playground surface at Potter Park Zoo made from the ground-up athletic shoes.

#### **Awards**

The Great Lakes Renewable Energy Association presented its Individual Commitment Award to Dave Konkle, the city of Ann Arbor's energy coordinator. In his 19 years in the job, Konkle is credited with saving the city more than \$8 million in energy costs and has won another \$2 million in grant funds for the city. He received the award for his efforts to increase the mainstream use of renewable energy in Michigan.

Jim Grogan, is the 2007 recipient of the Harbor Springs Chamber of Commerce Community Service Award, was an active member of the Holy Childhood parish; helped establish the Harbor Springs Community Food Pantry as a tax-exempt, non-profit corporation, served as board president and treasurer; was active in the local Historical Society, where he served on the Building Committee for the renovation of the old city hall into a new museum. Mr. Grogan passed away while serving his second term on Harbor Springs' city council.

#### Sustainable Energy Project Workshop

The workshop will be held on May 22, 2008 at Meadowbrook Hall, hosted by Oakland University, and will feature wind power and wood chip boiler projects. www.oakland.edu/energy/.

#### **Green Infrastructure Report**

#### Green Infrastructure in Michigan Report

The Land Policy Institute at MSU released its Comprehensive Study on Economic Valuation, Economic Impact Assessment and State Conservation Funding of Green Infrastructure Assets in Michigan. The report summarizes the results of three recently completed studies related to natural resource valuation, natural resource impact analysis and natural resource conservation funding. It also shows the significant value of water resources and green infrastructure assets, the tax benefits to local government due to those assets, the significant economic impact of parks, and that Michigan ranks 47th in the nation in its per capita spending on natural resource conservation.

#### National & State News

#### U.S. Conference of Mayors

In 2006, the nation's mayors passed a green infrastructure policy resolution at their annual meeting, in which they recognized that "green infrastructure naturally manages stormwater, reduces flooding risk, and improves air and water quality, thus performing many of the same functions as traditionally built infrastructure, often at a fraction of the cost."

#### Michigan Urban Core Mayors

On January 10, 2007, Michigan's Urban Core Mayors set a goal of meeting 15 percent of Michigan's energy demand from renewable energy by 2015. They also urged the state to adopt a Renewable Portfolio Standard based on a "15 by 15" renewable energy pledge and encouraged their staff to jointly explore available technologies for energy efficiency and renewable energy use in municipal operations.

#### Michigan Clean Cities Program

'Clean Cities' is a locally based government and industry partnership, coordinated by the U.S. Department of Energy (DOE) to expand the use of alternatives to gasoline and diesel fuel. Nationwide, more than 80 cities and regions have been designated Clean Cities. The following are Michigan's designees: Ann Arbor Clean Cities Program, Detroit Area Clean Cities Coalition, and the Greater Lansing Area Clean Cities Coalition.

Kim Cekola is the research associate/publications editor for the League. You may reach her at 734-669-6321 or kcekola@mml.org.

# What is Green Infrastructure?

Green infrastructure is a connected network of natural areas and other open spaces planned and managed to conserve natural ecosystems. These lands provide multiple benefits to people and wildlife such as maintaining clean air and water and providing areas for recreation. Often these natural areas are connected to communities by trails or greenways.

#### Why is Green Infrastructure Important?

The consumption of our natural lands for development (residential and commercial) have created disconnected communities, fragmented habitats, disruption of natural landscape processes and a degradation of water quality. This has prompted people to take action to ensure the sustainability of natural resources and our region.

"Just as we must carefully plan for and invest in our capital infrastructure—our roads, bridges and waterlines, we must invest in our environmental or green infrastructure—our forests, wetlands, streams and rivers." Paris Glendening, Governor of Maryland.

#### Key Principles of Green Infrastructure

Developing a comprehensive approach to green infrastructure is key to ensuring its success. By interconnecting green space networks with human forms we can provide for beautiful landscapes within our everyday society.

#### Ten Principles of Green Infrastructure

- 1. Connectivity is key.
- 2. Context matters.
- 3. Green infrastructure should be grounded in sound science and land-use planning theory and practice.
- 4. Green infrastructure can and should function as the framework for conservation and development.
- 5. Green infrastructure should be planned and protected before development.
- 6. Green infrastructure is a critical public investment that should be funded up front.
- 7. Green infrastructure affords benefits to nature and people.
- 8. Green infrastructure respects the needs and desires of landowners and other stakeholders.
- 9. Green infrastructure requires making connections to activities within and beyond the community.
- 10. Green infrastructure requires long-term commitment.

#### Did you Know Michigan Has:

- Over 3,200 miles of freshwater coastline—more than any other state in the country
- More than 11,000 inland lakes and 36,000 miles of rivers and streams
- In Michigan, you are never more than 6 miles from a lake or stream
- Stand anywhere in Michigan and you are within 85 miles of a Great Lake
- 1,300 designated mountain bike and bicycle trails
- 600 campgrounds
- 97 state parks



Michigan Department of Natural Resources, photo David Kenyon

#### Green Infrastructure Terms

Connectivity—the creation of functionally contiguous blocks of land or water through linkage of similar ecosystems or native landscapes; the linking of trails, communities, and other human features.

Corridor—a narrow or linear segment of land that differs from the matrix on each side; they may serve as biological and/ or hydrological connecting corridors and/or provide outdoor, resource-based recreational opportunities.

Hubs-anchor green infrastructure networks and provide space for native plants and animal communities, as well as an origin or destination for wildlife, people, and ecological processes moving through the system.

Natural Area-places within nature that have not been changed by human settlement.

Trail-a linear corridor on land or water that provides public access for recreation of authorized alternative modes of transportation.

#### Low Impact Development-

Low Impact Development (LID) is an approach to land development that uses various land planning and design practices and technologies to simultaneously conserve and protect natural resource systems and reduce infrastructure costs. These techniques can be useful in green infrastructure because of the linkages to human forms such as downtown corridors, residential developments and business areas. By incorporating LID approaches in our human developments, we can lessen the impacts that they have on the environment.



#### Common Low Impact Development Approaches Include:

- Trees and Tree Boxes
- Vegetated Filter Strips—land areas of either planted or indigenous vegetation situated between a potential pollutant-source area and a surface-water body that receives runoff.
- Rain Gardens (see pg 24-25)
- Reforestation
- Vegetated Swales-broad, shallow channels with dense vegetation covering the side slopes and bottom; trap particulate pollutants (suspended solids and trace metals), promote infiltration, and reduce the flow velocity of stormwater runoff.

- Protection of Natural Features
- Pocket Wetlands
- Riparian Buffers/Forested Buffers-the area
  of land next to a stream; the streambanks and
  floodplain area. Typically, in nature, these areas
  are forested.
- Green Roofs (see pg 11)
- Green Parking-setting maximums for the number of parking lots created, minimizing the dimensions of parking lot spaces, utilizing alternative pavers in overflow parking areas, encouraging shared parking and providing economic incentives for structured parking.

Information provided by Southwest Michigan Planning Commission. 185 East Main St. Ste 701, Benton Harbor, MI 49022. FAX: 269-925-0288 Phone: 269-925-1137

## Green Infrastructure-Eight Michigan Initiatives

Compiled and reported by Kim Cekola

#### **GLS Green Links**

(Genesee, Lapeer, and Shiawassee Counties)

#### www.flintriver.org/greenlinks/aboutus.html

GLS Greenlinks was formed by the Flint River Watershed Coalition and the UM-Flint's Center for Applied Environmental Research. Using a science and community based approach to identify land best suited for conservation and recreation, GLS Greenlinks is working to provide a framework or "green network" for resource protection and conservation activities. With successful implementation and proper management, this approach will help ensure the sustainability of our region's resources. GLS Greenlinks envisions "connected communities, both natural and cultural, created through regional collaboration and effective planning that protects and enhances our region's green infrastructure." A green network for the region can provide benefits such as improved water quality, wildlife habitat and diversity, outdoor education and recreation opportunities, and accessible non-motorized transportation corridors.

protection and address aspects of complying with federally mandated environmental regulations. They also provide assistance to land conservancies in prioritizing parcels for preservation.

#### Mid Michigan, Tri-County Region

(Clinton, Eaton, and Ingham Counties)

#### www.greenmidmichigan.org

Proactively planning to protect natural resources while improving the quality of life for Mid-Michigan residents is the primary reason the Tri-County Land Use and Health Resource Team and others are working in conjunction with Tri-County Regional Planning Commission to raise awareness about green infrastructure and the importance of planning for it. An effort to develop a green infrastructure plan for the Tri-County Region, called "Greening Mid-Michigan" is underway. On March 6, 2008, a workshop was held to provide an educational opportunity for area residents and community leaders about the benefits of green infrastructure and the resources available in Mid-Michigan to get started. Implementation of a green infrastructure plan will, in the long run, produce sustainable health benefits for both the natural environment and people.

## Growing Greener in Southwest Michigan (Berrien, Cass, and Van Buren Counties)

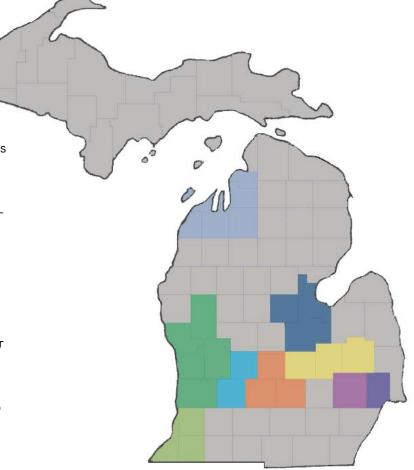
#### www.swmpc.org/growgreen.asp

Growing Greener in Southwest Michigan is a multijurisdictional initiative, encompassing Berrien,
Cass and Van Buren Counties, which seeks to
create a vision of green infrastructure based
on science and public input. This vision can be
used as a tool for more sustainable economic and
community development in southwest Michigan. The goal
of the Natural Areas Program is to provide local communities
with a forum, process, and technical assistance to identify
an interconnected network of green space that conserves
natural ecosystem values and functions, guides sustainable
development, and provides associated economic and qualityof-life benefits.

#### **Macomb County**

#### www.macombcountymi.gov/gis/news.htm

In 2003, Macomb County contracted with Michigan Natural Features Inventory to delineate remaining natural areas. This information combined existing data from a Wetland Indicator Map, Non-Motorized Transportation Plan, and other Geographic Information System files (e.g., soils, woodlots) were processed to rank the remaining natural areas and derive the elements of a green infrastructure network: the hubs, sites, and links. This information was used to develop an 'Environmental Toolbox' to assist Macomb communities, at their request, to apply ordinances for local environmental



#### Oakland County-Green Infrastructure Visioning Project www.oakgov.com/peds/program\_service/es\_prgm/ green\_infras/gi\_project.html

Oakland County's Green Infrastructure Visioning Project focuses on identifying an interconnected network of green space that conserves natural ecosystem values and functions, guides sustainable development, and provides associated economic and quality-of-life benefits to our communities. It's an interconnected network of open spaces, natural areas and waterways. Focus is on conservation values and the services provided by natural systems in concert with, not in opposition to, land development.

#### Saginaw Bay Greenways

#### www.saginawbaywin.org/projectforms.html

As part of an ongoing focus on land use issues, a core group of Saginaw Bay Watershed Initiative Network (WIN) members came together in 1999 to begin a discussion of a watershed-wide greenways vision. The importance of sustaining and expanding the watershed's resource base—our "green infrastructure"—is a primary goal of the WIN effort and of the WIN Greenways Collaborative. This effort aims to establish the framework by which a 22-county greenway vision can be both formulated, and implemented, in the Saginaw Bay Watershed.

## West Michigan Strategic Alliance www.wm-alliance.org

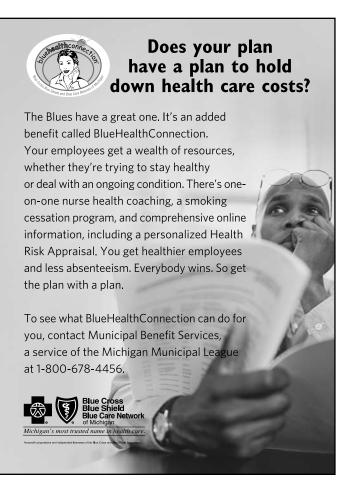
The West Michigan Strategic Alliance was launched in 2000 to be a catalyst for regional collaborations among the businesses, institutions and governmental units of the greater Grand Rapids, Muskegon and Holland areas. Following the 2004 recommendations of a green infrastructure task force, the West Michigan Strategic Alliance convened more than 40 organizations to form a Green Infrastructure Leadership Council to take action. The council developed a 25-year vision that strategically considers West Michigan's green infrastructure in six categories: critical areas of biodiversity; trails and greenways; regional watersheds; shorelines and dunes; urban green areas; and farmlands.

## WildLink-Northwest Michigan www.rivercare.org

The WildLink program assists volunteer land owners in managing private property corridors used by wildlife for travel between one large parcel of land (such as state-owned wildlife areas) to another. Its aim is to preserve the rural character of northwestern Michigan for outdoor recreation, hunting and wildlife watching in natural surroundings. The program assists landowners in outlining a five to ten-year voluntary program for developing or modifying land use in order to keep wildlife corridors open for animal movement.

Kim Cekola is the research associate/publications editor for the League. You may reach her at 734-669-6321 or kcekola@mml.org.







Nominate an outstanding chief elected official to become the first recipient of the:

## Michael A. Guido Leadership and Public Service Award

#### **Award Criteria**

The Michael A. Guido Leadership and Public Service Award was created in memory of Dearborn Mayor Michael Guido to honor a chief elected official who embodies professionalism and leadership, dedication to the citizenry of his/her community, and advocacy efforts on their behalf in Lansing and Washington, DC.

#### Award Eligibility

#### Nominees must be:

- a chief elected official who has demonstrated excellence in leadership,
- a chief elected official who has shown perseverance in making a difference in their community for a sustained period of time,
- from a Michigan Municipal League member community,
- in an elected municipal office through December 1, 2008.

## Michael A. Guido

Mayor, City of Dearborn Michigan Municipal League Past President

July 3, 1954 - December 5, 2006

- Was the only person to serve as the League's President, President of the Michigan Association of Mayors, and President of the United States Conference of Mayors
- Valiantly lobbied in Lansing and D.C. on behalf of his community
- Initiated outstanding improvements to city services
- Oversaw the completion of dramatic private developments that improved the city's tax base and long term viability

#### Nomination Procedure

To download a nomination form and related materials visit www.mml.org/awards.

Nominations must be received at League headquarters by June 15, 2008. Submit nominations by mail to: Michigan Municipal League, Attn: Award Nominations, PO Box 1487, Ann Arbor, MI 48106-1487; by fax to: 734-662-9399; or by email to: awards@mml.org

#### **Award Selection**

An awards committee consisting of the League president, vice president, executive director, and the Michigan Association of Mayors president and vice president will serve as the judges.

The award will be presented during the Annual Convention banquet on Friday, October 3, 2008.

Nominate an outstanding individual who has provided exemplary service to the League and its mission for the:

## Jim Sinclair Exceptional Service Award

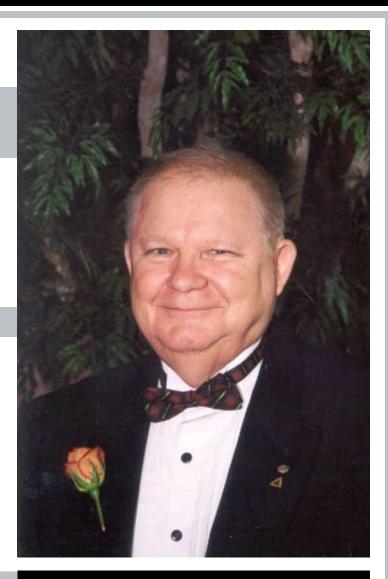
#### **Award Criteria**

The Jim Sinclair Exceptional Service Award was created in memory of Rogers City Councilmember Jim Sinclair. Jim was a tireless worker and promoter of local government and a fervent believer in education and training for elected officials. This award was created to honor Jim's legacy of personal dedication, passion, and commitment to the League and its mission.

#### **Award Eligibility**

#### Nominees must be:

- affiliated with the League in the capacity of a municipal official, municipal staff, a League staff member, or an active participant in the League's mission.
- active in furthering the cause of educating elected officials so that communities may benefit from the education and experience that their elected officials have gained.



#### Nomination Procedure

To download a nomination form and related materials visit www.mml.org/awards.

Nominations must be received at League headquarters by June 15, 2008. Submit nominations by mail to: Michigan Municipal League, Attn: Award Nominations, PO Box 1487, Ann Arbor, MI 48106-1487; by fax to: 734-662-9399; or by email to: awards@mml.org

#### **Award Selection**

An awards committee consisting of the League president, vice president, executive director, and the Elected Officials Academy president and vice president will serve as the judges.

The award will be presented during the Annual Convention banquet on Friday, October 3, 2008.

#### James L. Sinclair

Councilmember, City of Rogers City Michigan Municipal League Past President

March 26, 1941 - May 12, 2007

- Enthusiastically supported the League's mission and promoted its purpose
- Graduated from Level 3 of the Elected Officials Academy
- Visited 331 Michigan cities and villages
- Was a tireless promoter of the importance of education for elected officials

## Cities Can 'Buy Green' and Save Through NLC Program

by Marc Shapiro

Cities and towns across the country now have a new option to "go green" and demonstrate a commitment to environmentally sensitive purchasing while saving money at the same time through a national purchasing program sponsored by the National League of Cities (NLC).

The U.S. Communities Government Purchasing Alliance, through its green procurement initiative, is the one-stop source for cities, counties and schools to find a growing catalog of products that meet third-party environmental certification standards from ENERGY STAR to EcoLogo to Green Seal.

"Last year, NLC's leadership adopted a comprehensive plan to help cities become national leaders on sustainability and in promoting and adopting cost-effective 'green' programs," said Donald J. Borut, NLC executive director. "U.S. Communities is one such program that NLC is pleased to offer to assist cities in meeting this goal."

The public sector has led the way on environmentally sensitive purchasing for many years, but often to the detriment of the bottom line due to the premiums charged for these products. Now, through the U.S. Communities Government Purchasing Alliance, cities and towns are able to "buy green" while remaining in the budgetary black ink. Through cooperative purchasing and by aggregating spending volumes nationwide, the U.S. Communities program offers thousands of products at the most competitive pricing.

Whether it's office supplies, paper or toner, lighting and electrical, ENERGY STAR rated appliances and computers, Green Seal certified janitorial supplies, ergonomically correct office and school furniture, environmentally sound playground and recreational equipment, hypoallergenic safety equipment, or environmentally sensitive roofing products and related services, the U.S.

Communities team of suppliers provides it all at deep discounts.

The accompanying table (on the next page) provides a summary of the green products and suppliers by category available under the U.S. Communities banner. These same suppliers offer significant pricing, delivery and service savings to participating agencies.

The U.S. Communities program is easy to use. There is no fee to participate, no minimum spending and only a simple electronic registration is required. Any

city or town may register online by visiting www.uscommunities.org and clicking on "Register to Participate."

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Marc Shapiro is manager of Internet Services, Communications and Corporate Programs for the National League of Cities. You may contact him at 202-626-3019 or shapiro@nlc.org.



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The MPA is offered at these three WMU campuses:

Battle Creek 269.965.5380 bc.wmich.edu Kalamazoo 269.387.8930 wmich.edu/spaa/ Lansing 517.483.9728 lg.wmich.edu



Western Michigan University Extended University Programs

# The U.S. Communities Government Purchasing Alliance Green Products and Suppliers - 'Buy Green' Table

Office/School Supplies:	
Office Depot	<ul> <li>Over 2,400 office supply products designated as environmentally preferable including recycled paper and plastic products, refillable/non-toxic pens</li> <li>ENERGY STAR lighting and electronics</li> <li>Free ink &amp; toner cartridge recycling</li> </ul>
Office Furniture:	
Haworth (HQ in Holland, MI);  Herman Miller (HQ in Zeeland, MI see back cover for photo);  Knoll	<ul> <li>Support LEED</li> <li>GREENGUARD® certified products and interior environments</li> <li>Various additional environmental programs</li> <li>Take-Back Program helps qualifying schools recycle out-of-service furniture</li> <li>Highly sustainable ZUMAfrd™ products that have up to 70 percent recycled content GTSI, Inc.Technology Solutions</li> <li>ENERGY STAR certified products</li> </ul>
Technology Products:	
Tech Depot	EPEAT products
Electrical, Communication, Data:	
Graybar	<ul> <li>ENERGY STAR certified products</li> <li>Energy auditing and retrofit financing program</li> </ul>
Janitorial:	
ZEP	<ul><li>Green Seal certified cleaning products</li><li>Biodegradable, soy-based solvents</li></ul>
Office Machines:	
Ricoh, Savin, Gestetner	<ul> <li>ENERGY STAR certified equipment</li> <li>Product end-of-life management, including recycling and equipment de-manufacturing Landscape Structures;</li> </ul>
Parks/Playground:	
GameTime; Little Tikes	<ul> <li>Sustainable products that have recycled content</li> <li>100% post consumer recycled content</li> <li>100% recyclable products</li> </ul>
Maintenance, Repair, Operations:	
Home Depot Supply	<ul> <li>ENERGY STAR products</li> <li>Eco Options: Sustainable Forestry, Energy Efficient, Healthy Home, Clean Air, Water Conservation</li> </ul>
Roofing:	
Hickman Community Services	<ul> <li>Vegetative roof systems, reflective coatings and membranes, solvent-free materials and restoration products and services meeting USGBC LEED, and ENERGY STAR guidelines</li> </ul>
Auto Parts:	

Autozone

Fast Orange and Simply Green cleaning solutions

Oil recycling service with Safety-Kleen



# Go Green!

How 'bout those Spartans? Yes, I'm a Michigan State grad and a fan, but this time I'm referring to northern Michigan's progressive efforts to go green by reducing the state's dependence on fossil fuels. The following is just a small sample of some notable projects in the U.P. and northern-lower.

### Michigan's Wind Pioneer - Traverse City Light and Power

More than a decade has passed since Michigan's first wind turbine built by Traverse City Light and Power (TCLP) began providing wind power in 1996. According to the *Michigan Daily* (Hogg, March 27, 2006) this wind generation for the past 10 years has powered 160 area homes, totaling 1 million kilowatt-hours. At the time of construction, it was the largest turbine in the U.S. but is now considered small scale. One of the major obstacles to "going green" is finding the upfront backing for initial construction costs. The utility offered in advance a green rate to those willing to pay a little extra for the privilege of supporting the project. Participants currently pay about 2 cents more per kilowatt hour. However, notes Jim Cooper, TCLP key accounts and marketing manager, green customers do not pay fuel cost recovery adjustment fees, as do traditional customers.

### Two for the Show - Mackinaw City

Michigan's next promising site for wind turbines was again in northern Michigan, with two 0.9 megawatt turbines constructed in 2000, clearly visible from the Straits of Mackinaw and from northbound I-75 approaching the Mackinac Bridge. While the visibility was anticipated to raise some controversy, the turbines are actually a unique point of interest for tourists and provide valuable alternative energy awareness statewide. As the first public/private partnership of its kind in the state, agreements went through several proposal phases. Currently, the energy produced is sold to Consumers Energy and can be purchased as green power by Consumers Energy customers. In exchange for site locations near the water treatment plants, the village receives lease payments of \$900 per month per turbine, which are also on the personal property tax roll.

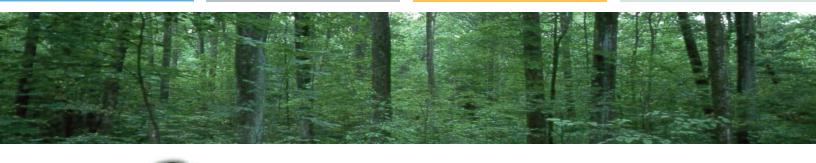
#### Senior Power - Ishpeming

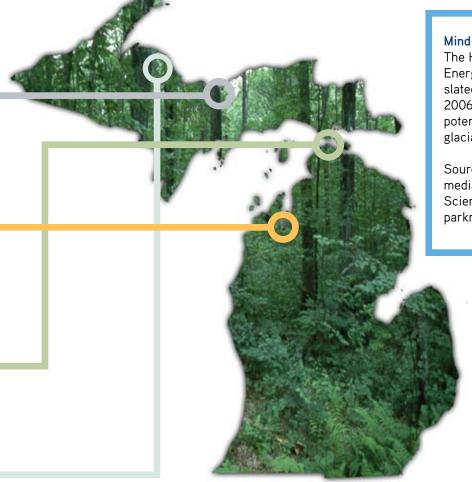
Pioneer Bluff, an 88-unit, low-income senior apartment complex and all-electric facility, will soon receive more than half its power from an alternative design vertical axis wind turbine, from WindStor Power Co. This public/private partnership was possible in part because HUD requires the Housing Commission to complete an energy study every five years. The commission was awarded a state grant for the study, which identified the location as favorable for wind energy. The commission made no investment, in exchange for providing WindStor the opportunity to build on site. The commission and WindStor signed a 20-year power purchase agreement, effective when the turbine becomes operational, slated for this spring. The agreement assures that wind power provided to the complex will always be 10 percent or less than local utility rates.

#### Photovoltaics in the Parks

Admittedly, I had to look this up in my trusty *American Heritage Dictionary*: "Capable of producing a voltage when exposed to radiant energy, esp. light." The Pictured Rocks National Lakeshore has three photovoltaic power systems. The most ambitious (1998) is at the historic 1874 remote Au Sable Light Station. According to the National Park Service, the system provides power for the lighthouse and associated exhibit; some utilities for seasonal resident workers; water well and fire suppression pumps; and fans reducing winter freeze-thaw damage. Arguably of greater importance, this system enabled subsequent site restoration. Sullivans Cabin, housing the seasonal residents, has a photovoltaic array on the roof, serving as both shingles and solar power collector. In 1992, the park system installed a campground photovoltaic-powered well pump system, that provides power for the well pump and allows water chlorination to alleviate potential bacterial issues. Five more were added to the park system, and the well house serves as a prototype. Power for North Manitou Island of the Sleeping Bear National Lakeshore park is provided entirely by a photovoltaic system.

Caroline Weber Kennedy is manager of field operations for the League. You may reach her at 906-428-0100 or email at ckennedy@mml.org.





#### Mind-blowing

The Harvest Wind Farm, LLC, John Deere Wind Energy is constructing more than 30 wind turbines slated for operation in Huron County this year. In 2006, Noble Environmental Power identified the potential for 250 wind turbines along 40 miles of glacial ridge in Michigan's thumb.

Sources: http://media.www.michigandaily.com/media/storage/paper851/news/2006/03/27/Science. (March 9 2008) http://www.nps.gov/piro/parkmgmt/photovoltaic.htm (March 9 2008)

### **Muni Energy Audits**

Curious about energy audits? Mackinaw City has a copy available at: www.mackinawcity.org





# Legal Spotlight

By Sue Jeffers

### Powers of the Circuit Court to Abate Nuisance

This column highlights a recent judicial decision or Michigan Municipal League Legal Defense Fund case that impacts municipalities. The information in this column should not be considered a legal opinion or to constitute legal advice.

### Facts:

Wayne County filed an action in the Wayne County Circuit Court alleging that the property located at 238 Mt. Vernon in Detroit was a nuisance and requested that the property owners be required to abate the nuisance. In November 2004, Nicholas and Rose Aggor, the property owners, agreed to an order by the circuit court requiring them to abate the nuisance at 238 Mt. Vernon within a specified period of time. When the Aggors failed to do so, the circuit court, on April 18, 2005 entered an order requiring the Aggors to appear in court to show cause why it should not set aside the stipulated order and enter a judgment in favor of Wayne County. On August 28, 2005, the circuit court found that the Aggors had violated the November 2004 order and ordered that title to the property be transferred to Wayne County so it could be sold at public auction, with a portion of the proceeds paid to the county for prosecuting the action. The property was subsequently demolished.

The Aggors argued that the court did not have the power to order a transfer of title. The Aggors also argued that the demolition of 238 Mt. Vernon was an unconstitutional taking in violation of the United States and Michigan constitutions.

### Question #1:

Does the circuit court have the power to enforce its orders?

Answer according to the trial (circuit) court:

Yes.

# Answer according to the Michigan Court of Appeals:

Yes. The court of appeals affirmed the traditional and inherent power of a circuit court to enforce its orders, specifically the November 2004 stipulated order requiring the Aggors to abate the nuisance at 238 Mt. Vernon. The court of appeals cited the statutory authority of a circuit court to abate a nuisance, MCL 600.2904(1) and (3). The court also cited the Michigan Supreme Court decision of *Maldonado v Ford Motor Co*, 476 Mich 372 (2006) which emphasized the circuit court's inherent power to enforce its orders.

### Question #2:

Was the demolition of 238 Mt. Vernon by the county an unconstitutional taking in violation of the United States and Michigan constitutions?

Answer according to the trial (circuit) court:

No.

# Answer according to the Michigan Court of Appeals:

No. The court of appeals cited its recent decision of *Ypsilanti Fire Marshal v Kircher*, 273 Mich App 496 (2007). The court noted that the federal and state constitutions both proscribe the taking of private property for public use without just compensation, recognizing, however, the so-called nuisance exception. The court explained that since no individual has the right to use his or her property so as to create a nuisance, "the [s]tate has not 'taken' anything when it asserts its power to enjoin [a] nuisance-like activity.

Wayne County v Nicholas Aggor, No. 266183, unpublished, July 19, 2007.



Sue Jeffers is associate general counsel for the League. You may contact her at 734-669-6306 or sjeffers@mml.org.



Legislator Salute

Frank Accavitti, State Rep.

42nd House District-Richland Twp.

State Rep. Frank Accavitti (D-Eastpointe) serves Michigan's 42nd House District. Chair of the House Energy and Technology committee, Accavitti is dedicated to protecting our lakes and rivers from corporations that want to bottle them up and sell them off for profit. He and his colleagues in the House have pledged to tackle the state's looming energy shortage and promote renewable energy and conservation. They also introduced an aggressive plan to establish Michigan as a twenty-first century powerhouse of renewable energy production to attract cutting-edge industries, boost the economy and create twenty-first century jobs for Michigan workers.

Energy and technology aside, Accavitti has several other priorities including creating new jobs for Michigan workers, raising Michigan's minimum wage and protecting the state's working families from corporate crooks who threaten workers' pensions and 401(k)s.

# Rep. Accavitti's Legislative Priorities:

- Creating new jobs for Michigan workers.
- Raising Michigan's minimum wage.
- Protecting our lakes and rivers from corporations that want to bottle them up and sell them off for profit.
- Protecting Michigan's working families from corporate crooks who threaten workers' pensions and 401(k)s.

With deep roots in Macomb County, Accavitti was a small business owner for 20 years before taking office. He also served as the city of Eastpointe's planning commissioner, city councilmember, and mayor. Accavitti graduated from Fraser High School and attended Western Michigan and Wayne State universities.





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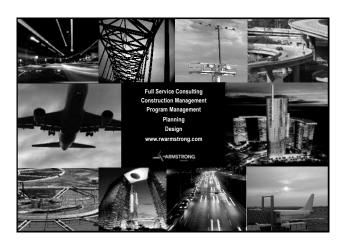


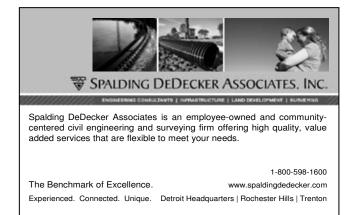
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# Municipal Q&A

Coordinated by Mary Charles

# l've heard the term "global warming" over and over-what does it mean exactly?

Global warming is the increase in the average temperature of Earth's near-surface air and oceans in recent decades and its projected continuation. The definition is easy. Determining the cause and finding the solution is a different matter.

The most commonly accepted cause is the increase in greenhouse gases. According to the National Oceanic and Atmospheric Administration, greenhouse gases effectively 'trap' heat with water vapor and carbon dioxide being the most common. Without a natural greenhouse effect, the temperature of Earth would be about 0° F instead of its present 57°F. However, this is not a case of "if a little is good, more is better," and the concern is that the continued warming caused by CO2 emissions will result in unacceptable climate change.

### Request for Information

The Resource Center relies on contributions from local officials to keep materials current. We would appreciate recieving:

 "Green" programs you have initiated in your community.

Please mail copies of your municipality's new ordinances, policies, resolutions, and innovative ideas to the League's Inquiry Service, 1675 Green Road, Ann Arbor, MI 48105; fax it to 734-663-4496 or email it to info@mml.org. Thank you!

l've heard a recent
environmental
catchphrase, "carbon
footprint." What exactly is it?

Essentially, carbon footprint means the amount of carbon dioxide emission created by people's actions—anything from how much you drive a car to whether you recycle. Reducing carbon footprints—whether they're made by an individual, a business, a community or a country—is considered key to reducing greenhouse gases that contribute to global warming.

How can I find out more about what my community can do-and what I can do-to conserve energy?

A number of the articles in this issue of *The Review* have dealt with "green" issues and solutions found in various Michigan communities. However, we've just touched the tip of the iceberg. So here are some additional resources you might find helpful.

### **Energy**

Clean Cities is a locally based government and industry partnership coordinated by the U.S. Department of Energy (DOE) to expand the use of alternatives to gasoline and diesel fuel. It combines local decision making with voluntary action by partners in a grass roots approach designed to build a sustainable alternative fuels market. There are three Michigan coalitions – Ann Arbor Area, Detroit Area and Greater Lansing Area. www1.eere. energy.gov/cleancities/.

**Great Lakes Renewable Energy Association** is a nonprofit organization that educates, advocates, promotes, and

publicly demonstrates renewable energy technologies including wind and solar technologies. www.glrea.org/.

#### **Green Infrastructure**

Rails-to-Trails Conservancy is a nonprofit organization working with communities to preserve unused rail corridors by transforming them into trails, enhancing the health of America's environment, economy, neighborhoods and people. www.railtrails.org/index.html.

ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping to save money and protect the environment through energy efficient products and practices. It includes programs for homes and appliances as well as commercial buildings and plants. www.energystar.gov/.

The Tree City USA® program provides direction, assistance, attention, and national recognition for urban and community forestry programs in thousands of towns and cities that more than 120 million Americans call home. www.arborday.org/programs/treeCityUSA/index.cfm.

#### Recycling

This is probably the "green" program with which we are all most familiar. And we have all heard the phrase "Reduce, Reuse, Recycle." Many Michigan communities have curbside recycling. Go to www. mml.org under resources and ordinances for sample ordinances. In addition there are websites available with useful tips: for adults, earth911.org/recycling and www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm; and even for kids: www.epa.gov/recyclecity/.

Mary Charles is a research analyst for the League You may contact her at 734-669-6322 or moharles@mml org

# Zeeland







If you want to 'FEEL THE ZEEL,' then take a stroll down Main Street and visit any shop or diner where stories are made and shared. Visit any neighborhood where front porches are memory catchers and sidewalks are popular. Take a look at flourishing innovation, from home-grown flower shops to Fortune 500s. Find your favorite curb and settle in for any one of our annual parades. And join the stands full of fans, friends, and family that support our local schools like each student is one of their own. The 'Zeel' is contagious and celebrated. And it's one-of-a-kind here in Zeeland.

The city, named after the Province of Zeeland in the Netherlands, is home to about 6,000 residents. Each day the city's population doubles, with twice as many people working in Zeeland as living there. In 2007, Ottawa County had the second lowest unemployment rate among the state's 17 labor markets. Awardwinning schools, traditional community values, and a robust job market continue to attract many young families to the area.

Zeeland is widely recognized for its industry, which accounts for the immense daily population increase and makes up 76 percent of the city's tax base. Consumers Energy, Mead Johnson, ITW Drawform, and Woodward FST are among some of the major industrial contributors to Zeeland's growing economy, as well as Herman Miller, Howard Miller, Gentex, Innotec Group, ODL, Inc., and Plascore, which are all headquartered in Zeeland.

An appreciation for sustainability and renewable resources makes some of Zeeland's largest enterprises nationally recognized for going green. Herman Miller is noted for surpassing environmental compliance standards; all four Herman Miller buildings in Zeeland are LEED certified, two of which have achieved a "Gold" rating. The Zeeland West High School is also setting environmental trends with their new building, which is designed to be among the most energy efficient in the country.

And speaking of green, during the summer downtown Zeeland focuses on fresh-from-the-farm produce at the weekly Main Place Market. So between industrial innovation, LEED certified construction and fresh veggies downtown, Zeeland is Feeling the 'Zeel!' www.feelthezeel.com

Text and photos by Abby deRoo, city marketing director and The Image Group.

# Better Communities. Better Michigan.

Please send address and recipient corrections to Susan Vasher at MML, P.O. Box 1487, Ann Arbor, MI 48106-1487; phone 800-653-2483; fax 734-662-8083, or email svasher@mml.org. Thank you.