

**City
of
Milwaukee**

INTERDEPARTMENTAL CORRESPONDENCE
LEGISLATIVE REFERENCE BUREAU

MEMO

To: Ald. Tony Zielinski

From: Leslie Silletti, Legislative Research Analyst

Date: June 27, 2006

Re: **ICLEI- Local Governments for Sustainability (ICLEI), and the Cities for Climate Protection Campaign (CCP)**

This information provides an overview of the International Council for Local Environmental Initiatives (ICLEI) and the Cities for Climate Protection Campaign (CCP). It also includes information relating to membership requirements and the City of Milwaukee's relationship with ICLEI and its programs. The Mayor's Council on Climate Protection is also addressed, as it relates to ICLEI's programming efforts.

OVERVIEW

The International Council for Local Environmental Initiatives (ICLEI) is an organization of local, national and regional governments that was formed in 1990. ICLEI states that its basic premise is, "...that locally designed initiatives can provide an effective and cost-effective way to achieve local, national and global sustainability objectives." ICLEI believes that there are global common goals for sustainable development, and that the best way to reach those goals is to encourage and support sustainable development at the local level. As it states, "it links local action to internationally agreed upon goals and targets."

The council is continually building its membership, with more than 475 members worldwide, representing 300 million people. Some of the benefits of membership in ICLEI include networking opportunities at regional, national and international events, access to Internet tools and resources on sustainable development, training for elected officials, assistance in finding funding sources and

representation at international meetings. Once communities become members, they are also able to join ICLEI initiatives and receive support from ICLEI support services.

Designed to be a long-term strategy, one of ICLEI's "internationally agreed upon goals" is Local Action 21. Local Action 21 is a directive issued to local governments to "move from agenda to action and ensure an accelerated implementation of sustainable development." It is the next phase of Local Agenda 21, which established a process for helping local governments identify local sustainability priorities and led to the preparation and implementation of long-term strategic plans. Local Action 21 takes Local Agenda 21 out of the planning stages and calls on its members to put local plans into action.

Local Action 21 is a 3-tiered approach. The first goal of LA21 is to remove barriers that impede sustainable development, as far-reaching as those may be. ICLEI has identified these as poverty, injustice and conflict, an unhealthy environment and insecurity. ICLEI has established a number of programs to accomplish this goal, including the Just, Peaceful and Secure Communities & Cities program and the Resilient Communities & Cities Initiative. The second goal is to reduce cities' contribution to the worldwide depletion of resources. To achieve this, local governments are involved in global campaigns, such as the Water Campaign, the Cities for Climate Protection Campaign (refer to section below), and others. Thirdly, Local Action 21 will implement management strategies that will improve municipal sustainability management. The goal is that as local governments participate in Local Action 21, national governments will provide support.

CITIES FOR CLIMATE PROTECTION CAMPAIGN

ICLEI's main initiative is the Cities for Climate Protection Campaign, which began in 1993. It attempts to help local governments in reducing the greenhouse gas emissions that cause global warming in an effective, efficient manner. So far, 770 communities worldwide participate in the program, 177 of which are in the U.S. Each ICLEI campaign follows the "milestone" process, and there are 5 milestones for each campaign that governments transition through. To participate in the CCP Campaign a government must work through the following 5 milestones:

1. **Conduct a local emissions inventory and forecast of greenhouse gas emissions.** ICLEI provides forms for collecting data and software for conducting the emissions inventory. Data are collected for local transportation, waste and energy consumption for a base year and makes predictions for a forecast year. The City of Milwaukee has been reporting in the areas of waste reduction and transportation efforts to ICLEI for many years, and these data could be used to establish a baseline for some point in the past.

2. **Adopt an emissions reduction target for the forecast year.** The community adopts a resolution establishing the target.
3. **Draft an action plan to achieve the target.** It will describe the policies and measures that the community will use to reduce greenhouse gas emissions and achieve its target.
4. **Implement the action plan.** Typical projects include energy efficient improvements to municipal buildings and water treatment facilities, streetlight retrofits, public transit improvements and methane recovery from waste management.
5. **Evaluate, report on progress and update plans.** This is an ongoing process. It begins with implementation of the measures and continues for the life of the measures. The software that ICLEI provides ensures uniformity among how different cities report on their initiatives.

An ICLEI official stated that although the City of Milwaukee does not have a local action plan on file yet, it would be easy to enter data relating to previous projects and reports into the software, along with more current information.

When communities participate in CCP, they benefit from reduced greenhouse emissions in their communities, access to a network of local governments and technical assistance, emissions analysis software and workshops, among other benefits, sponsored by ICLEI. There is a CCP toolkit to assist communities accomplishing the 5 milestones.

MEMBERSHIP

There are different levels of involvement that a local government can have with ICLEI. Local governments may participate in ICLEI campaigns without being full members, or they can take the steps to full membership. An ICLEI Development Officer stated, however, that by the beginning of 2007, ICLEI activities and services will be available only to members.

To become a full ICLEI member, a local government must adopt a resolution that pledges to reduce greenhouse emissions from its local government operations, complete an application and pay annual dues (Dues are for the calendar year, are pro-rated and are calculated according to population. Annual dues would be \$3500 for the City of Milwaukee). The ICLEI Charter governs all ICLEI Council Members.

Each member (local government) has one representative on the Council, and the Council establishes ICLEI's Strategic Plan. Members elect 21 representatives who comprise ICLEI's Executive Committee, which oversees ICLEI's operations and implementation of the strategic plan.

Each member has one liaison and one elected liaison. In the City of Milwaukee, the liaison is Kimberly Kujoth, in DPW's Environmental Services, and the elected liaison is Mayor Barrett.

Madison is the only Wisconsin city that is designated as a full member.

CITY OF MILWAUKEE AND ICLEI

The City of Milwaukee has participated in the Cities for Climate Change Campaign (CCP) for many years, but it is not a full member of ICLEI. Its participation was limited to reporting to ICLEI actions in the areas of waste reduction and transportation efforts that resulted in the reduction of greenhouse gas emissions. If the city does not become a full member, by 2007 it will not be able to be part of any ICLEI activities or enjoy ICLEI services.

The Outreach Officer stated that although new members are required to adopt a resolution in order to become members, local governments that took part in the official launch of the Cities for Climate Protection Campaign, and signed the proclamation, were deemed CCP participants in recognition of their ongoing participation in ICLEI programs. Because of the City of Milwaukee's participation in the signing of the proclamation, and because of its long association with the CCP, it would not be required to adopt a resolution. The next step to becoming a full member is to complete the application and mail it in, at which time ICLEI's Outreach Officer would send an invoice for the pro-rated annual membership fee. It is yet unclear which City of Milwaukee official attended the CCP launch and signed the declaration. That information will be provided as it becomes available.

If the City of Milwaukee wished to propose a resolution anyway, an ICLEI template resolution is attached as "Attachment 1."

The City of Milwaukee is a participant in ICLEI's The Great Lakes Climate Policy Coordination Project Working Group, along with Ann Arbor, Buffalo, Chicago, Duluth, Minneapolis, St. Paul, Toledo and Toronto. The project began June 28, 2005. Its proposed projects are reducing Carbon Dioxide emissions through the implementation of the Mayor's Green Team recommendations, to convert traffic signals to LED, increase the city's tree canopy and continue lead-based paint abatement through the "Healthy Homes" initiative.

Mayor Barrett will be receiving an invitation to join ICLEI later this year, and last year ICLEI's Outreach Officer met with Ald. Murphy. Previously, ICLEI had met with representatives from DCD, DPW and Mayor Norquist.

MAYORS' COUNCIL ON CLIMATE PROTECTION

In June, 2006, The U.S. Conference of Mayors formed a partnership with ICLEI, with the goal of reducing greenhouse gas emissions in cities through outreach,

education and technical assistance, and formed the "Mayors' Council on Climate Protection."

At the 2005 conference, the mayors unanimously adopted the U.S. Conference of Mayors Climate Protection Agreement. The resolution sets a goal for cities to reduce their greenhouse gas emissions by 7% from 1990 levels to 2012, a goal that was established in the Kyoto Protocol to the United Nations Framework Convention on Climate Change, an international treaty on climate change.¹ Since its adoption, more than 238 cities have pledged their support for the resolution. A copy of the resolution is attached as "Attachment 2." Wisconsin cities that have adopted the Mayor's Climate Protection Agreement are Ashland, Greenfield, La Crosse, Madison, Racine, Washburn, Wauwatosa and West Allis. If the City of Milwaukee would like to endorse the U.S. Mayor's Climate Protection Agreement, the Common Council can either adopt a resolution, or the Mayor can simply sign on behalf of himself and the City of Milwaukee. It is structured as a voluntary agreement between mayors, and it is the decision of the Mayor as to if and how he would like to proceed. Currently, the City of Seattle is in charge of organizing this initiative.

The U.S. Conference of Mayor's Environmental Policy department sent out a survey in 2005 that asked cities across the U.S. to provide information about their environmental sustainability initiatives. The survey responses were compiled into the first edition of the "Energy & Environment Best Practices Guide." The City of Milwaukee did not have its survey completed in enough time to be included in the first edition, but the responses will be included in the second edition, which is scheduled to be released in fall of 2006. Attached ("Attachment 3") are the City of Milwaukee's responses to the survey, which were submitted by Brooke VandeBerg in the Mayor's office. The City of Milwaukee provided information about the Milwaukee Green Team, the Office of Environmental Sustainability, stormwater management and energy efficiency programs, including discussion of the renewable energy program, the LED traffic light replacement program and the alternative fuels program.² Following is a link to the 110-page paper: http://www.usmayors.org/uscm/best_practices/EnergySummitBP06.pdf

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¹ The United States signed the treaty in 1997, but has not yet ratified it. The Protocol was implemented in February, 2005.

² The Alternative Fuels Program focuses on negotiating a new fuel contract that includes the purchase of biodiesel at a 2% blend (B2). There is no mention of ethanol in this report.

Attachment 1



Sample Resolution
City/Town/County of _____ Sample Resolution
ICLEI Membership & Cities for Climate Protection® Campaign Participation

WHEREAS, scientific consensus has developed that Carbon Dioxide (CO₂) and other greenhouse gases released into the atmosphere have a profound effect on the Earth's climate; and

WHEREAS, in 2006 the U.S. National Climatic Data Center confirmed clear evidence of human influences on climate due to changes in greenhouse gases; and

WHEREAS, the US Conference of Mayors endorsed the 2005 US Mayors Climate Protection Agreement initiated by Seattle Mayor Nickels and as of June, 2006, signed by 238 U.S. mayors; and

WHEREAS, the Urban Environmental Accords adopted by local government delegates during UN World Environment Day 2005 call for reduced emissions through energy-efficiency, land use and transportation planning, waste reduction, and wiser energy management; and

WHEREAS, in 2003 the American Geophysical Union adopted a Statement noting that human activities are increasingly altering the Earth's climate and that natural influences cannot explain the rapid increase in near-surface temperatures observed during the second half of the 20th century; and

WHEREAS, in 2001, at the request of the Administration, the National Academy of Sciences (NAS) reviewed and declared global warming a real problem caused in part by the actions of humankind; and

WHEREAS, the 2001 Third Assessment Report from the International Panel on Climate Change (IPCC) and the 2000 U.S. Global Change Research Program's (USGCRP) First National Assessment indicate that global warming has begun; and

WHEREAS, 162 countries including the U.S. pledged under the United Nations Framework Convention on Climate Change to reduce its greenhouse gas emissions; and

WHEREAS, energy consumption, specifically the burning of fossil fuels, accounts for more than 80% of U.S. greenhouse gas emissions; and

WHEREAS, local government actions taken to reduce greenhouse gas emissions and increase energy efficiency provide multiple local benefits by decreasing air pollution, creating jobs, reducing energy expenditures, and saving money for the local government, its businesses and its residents; and

WHEREAS, the Cities for Climate Protection Campaign sponsored by ICLEI Local Governments for Sustainability has invited the **City/Town/County of _____, State**, to join ICLEI and become a partner in the Cities for Climate Protection Campaign;

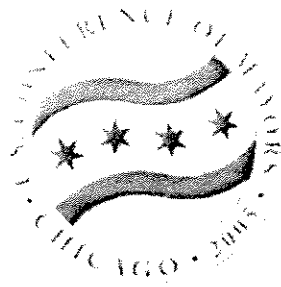
NOW THEREFORE, BE IT RESOLVED, that the **City/Town/County of _____** commits to participate in the Cities for Climate Protection Campaign and, as a participant, pledges to take a leadership role in promoting public awareness about the causes and impacts of climate change. The **City/Town/County of _____** will undertake the Cities for Climate Protection Program 5 milestones to reduce both greenhouse gas and air pollution emissions throughout the community, specifically:

- conduct a greenhouse gas emissions inventory and forecast to determine the source and quantity of greenhouse gas emissions in the jurisdiction;
- establish a greenhouse gas emissions reduction target;
- develop an action plan with both existing and future actions which when implemented will meet

- the local greenhouse gas reduction target;
- implement the action plan; and
- monitor and report progress; and

BE IT FINALLY RESOLVED, that the **City/Town/County of _____** requests assistance from ICLEI's Cities for Climate Protection Campaign (CCP) as it progresses through the milestones.

Attachment 2



2005 ADOPTED RESOLUTIONS
ENVIRONMENT

ENDORISING THE U.S. MAYORS CLIMATE PROTECTION AGREEMENT

WHEREAS, the U.S. Conference of Mayors has previously adopted strong policy resolutions calling for cities, communities and the federal government to take actions to reduce global warming pollution; and

WHEREAS, the Inter-Governmental Panel on Climate Change (IPCC), the international community's most respected assemblage of scientists, has found that climate disruption is a reality and that human activities are largely responsible for increasing concentrations of global warming pollution; and

WHEREAS, recent, well-documented impacts of climate disruption include average global sea level increases of four to eight inches during the 20th century; a 40 percent decline in Arctic sea-ice thickness; and nine of the ten hottest years on record occurring in the past decade; and

WHEREAS, climate disruption of the magnitude now predicted by the scientific community will cause extremely costly disruption of human and natural systems throughout the world including: increased risk of floods or droughts; sealevel rises that interact with coastal storms to erode beaches, inundate land, and damage structures; more frequent and extreme heat waves; more frequent and greater concentrations of smog; and

WHEREAS, on February 16, 2005, the Kyoto Protocol, an international agreement to address climate disruption, went into effect in the 141 countries that have ratified it to date; 38 of those countries are now legally required to reduce greenhouse gas emissions on average 5.2 percent below 1990 levels by 2012; and

US has not ratified

WHEREAS, the United States of America, with less than five percent of the world's population, is responsible for producing approximately 25 percent of the world's global warming pollutants; and

WHEREAS, the Kyoto Protocol emissions reduction target for the U.S. would have been 7 percent below 1990 levels by 2012; and

WHEREAS, many leading US companies that have adopted greenhouse gas reduction programs to demonstrate corporate social responsibility have also publicly expressed preference for the US to adopt precise and mandatory emissions targets and timetables as a means by which to remain competitive in the international marketplace, to mitigate financial risk and to promote sound investment decisions; and

WHEREAS, state and local governments throughout the United States

are adopting emission reduction targets and programs and that this leadership is bipartisan, coming from Republican and Democratic governors and mayors alike; and

WHEREAS, many cities throughout the nation, both large and small, are reducing global warming pollutants through programs that provide economic and quality of life benefits such as reduced energy bills, green space preservation, air quality improvements, reduced traffic congestion, improved transportation choices, and economic development and job creation through energy conservation and new energy technologies; and

WHEREAS, mayors from around the nation have signed the U.S. Mayors Climate Protection Agreement which, as amended at the 73rd Annual U.S. Conference of Mayors meeting, reads: The U.S. Mayors Climate Protection Agreement A. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels; B. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that includes 1) clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; and C. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as: 1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan. 2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities; 3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit; 4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology; 5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money; 6. Purchase only Energy Star equipment and appliances for City use; 7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system; 8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel; 9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production; 10. Increase recycling rates in City operations and in the community; 11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO₂; and 12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

NOW, THEREFORE, BE IT RESOLVED that The U.S. Conference of Mayors endorses the U.S. Mayors Climate Protection Agreement as amended by the 73rd annual U.S. Conference of Mayors meeting and urges mayors from around the nation to join this effort.

BE IT FURTHER RESOLVED, The U.S. Conference of Mayors will work in conjunction with ICLEI Local Governments for Sustainability and other appropriate organizations to track progress and implementation of the U.S. Mayors Climate Protection Agreement as amended by the 73rd annual U.S. Conference of Mayors meeting.

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Attachment 3

United States Conference of Mayors
Mayors Summit on Energy and the Environment
Chicago, IL
May 10-11, 2006

Best Practices Survey – Sustainability

1. Milwaukee Green Team

In February 2005, Milwaukee Mayor Tom Barrett formed the Milwaukee Green Team (MGT) comprised of leaders from the business, university, government, community and non-profit sectors to focus on ways the city could move forward on the issues of stormwater management, energy conservation and efficiency and creating green jobs. The Milwaukee Green Team's Report to Mayor Tom Barrett is available at www.milwaukeegreenteam.org.

Benefits

The MGT presented the Mayor with recommendations to improve the city's sustainability. Mayor Barrett will use these recommendations to formulate a comprehensive green plan for the city. In putting his team together, Mayor Barrett wanted to take advantage of the expertise in the community and to be as inclusive as possible. By doing so, this effort has received support from all sectors of the community which will help move Milwaukee forward.

Cost

The Milwaukee Green Team was convened at no cost.

2. Office of Environmental Sustainability

Resulting from the Milwaukee Green Team recommendations, Mayor Tom Barrett created the Office of Environmental Sustainability and is hiring a Director in Spring 2006. The Director of Environmental Sustainability will steer citywide environmental policy, help set department goals and strategies and track their performance. The Director of Environmental Sustainability will also serve as a resource for the private sector to achieve their green goals.

Benefits

The role of the Office of Environmental Sustainability is to improve Milwaukee's environmental performance. Having one position, the new Director, responsible for the city's sustainability efforts is critical to the overall success in making Milwaukee a greener, more sustainable city.

Cost

In its first year, the Director of Environmental Sustainability position will be funded through water service revenues. The Director is expected to bring in outside funding through grants, foundations and operational savings.

Best Practices Survey – Stormwater Management

I. Stormwater Management Initiatives:

Reducing Milwaukee's stormwater runoff is one of Mayor Barrett's highest priorities. To accomplish this, he directed departments to reduce stormwater runoff by 15% from city properties. Several initiatives have been implemented to manage stormwater on-site and to promote stormwater infiltration and absorption:

- *Catch Basin Flow Controllers** – The City installed flow controllers in city street catch basins that control stormwater runoff. During wet weather events, stormwater is held in the street basin and released over time to reduce peak flows and increase the capacity of the combined sewer system to handle sanitary flows. A total of 79 catch basin flow controllers were installed.
- *Roof Drain Flow Restrictor Pilot Project* – Pilot project to install roof drain flow restrictors to reduce peak flow from city buildings. The restrictors allow rainwater to temporarily form pools on the rooftop and allow a slower rate of draining over an extended period of time. The pilot project was successfully completed in 2005 and will be expanded in 2006. A total of 55 roof drain flow restrictors were installed at the following locations:
 - *Milwaukee Fire Department Engine House #4* – 9511 W. Appleton Avenue
 - *Milwaukee Fire Department Engine House #24* – 4927 W. Fiebrantz Avenue
 - *Milwaukee Police Department 3rd District Station* – 2333 N. 49th Street
 - *Milwaukee Police Department 4th District Station* – 6929 W. Silver Spring Drive
 - *Milwaukee Police Department 7th District Station* – 3626 W. Fond du Lac Ave
 - *Milwaukee DPW Municipal Storage* – 1016 N. Hawley Road
 - *Milwaukee DPW North District Field Station* – 8424 W. Florist Avenue
 - *Milwaukee DPW Forestry/Sanitation North District* – 6732 N. Industrial Road
- *Foundation Drain Disconnect Project** – Project to disconnect Milwaukee homeowners' foundation drains from the sanitary sewer system. Prior to 1954, homes were commonly constructed with foundation drains connected to sanitary sewers increasing the amount of stormwater runoff entering the system and reducing capacity during storms.
- *Disconnect and Redirect Project* – A targeted neighborhood program that disconnected residential downspouts from the combined sewer system and redirected rainwater into homeowner's lawn, rain garden or rain barrel. Homeowners had the option to sign-up for a city contractor to perform the disconnection work free of charge or complete the work themselves and receive a \$50 rebate for each disconnection up to \$100. Leading by example, Mayor Barrett had his home downspouts disconnected from the combined sewer system.
- *Lloyd Street School Bioretention Demonstration Project* - Retrofit of playground at Lloyd Street School located at 1228 W. Lloyd Street with a bioretention zone (or bioswale) to increase on-site stormwater retention and infiltration. The bioretention zone will be used as an environmental learning laboratory. The feature serves to connect children to the environment and a project curriculum educates them on stormwater and natural systems.
- *Stormwater Parking Demonstration Project* – Retrofit of a city-owned parking lot located at 365 E. Ward Street with porous pavement and a rain garden.
- *Josey Heights Single-Family Subdivision** – Development will use porous concrete in

streets and alleys of subdivision bounded by 12th to 14th Streets and Lloyd and Brown Streets. Will also incorporate the use of bioswales in landscaping plan.

- *Residential Action in Neighborhoods (RAIN)** – Provides residential downspout disconnection for homeowners in the Walnut Way neighborhood. The City provides design specifications and plants the rain gardens on private property.
- *Stormwater Ordinance* – Update and revise the city's stormwater ordinance to be user-friendly, incorporate the use of green best management practices and clarify requirements.
- *Erie Street Plaza* – The City of Milwaukee will soon add a landmark public plaza to Milwaukee's Harbor entrance that features a mix of industrial land use, native plantings and a touch of the exotic – illuminated fiberglass benches scattered among a grove of bamboo trees. The Plaza is a result of an international design competition with the winning design using a 'sustainable garden' to keep stormwater on-site in a creative, attractive way combining concrete unit pavers, native and exotic plantings, stormwater 'steam' generators, benches and lights.

*In partnership with Milwaukee Metropolitan Sewerage District

Benefits

The multiple best practices employed result in reducing peak stormwater flows and reduces the runoff entering the area's combined sewer system. Many of these practices also provide other benefits such as improved air quality, lower air temperatures and reduced urban heat island impact and beautification.

Cost

The cost of the stormwater management initiatives is spread over multiple departments. In many cases project partners are contributing funding to reduce the financial impact to the City.

2. Increase Tree Canopy

The City is working to increase its tree canopy from 16% to 30% by increasing the number of trees planted on public property where possible and promoting increased tree plantings on private property.

Benefits

An increased tree canopy reduces stormwater runoff, cools and shades, reduces energy use, provides social benefits and beautifies neighborhoods.

Best Practices Survey – Energy

1. Energy Efficiency Program:

As a result of an October 2005 energy walk-thru that assessed energy use and identified energy saving options, Mayor Barrett directed a 10% reduction in energy consumption for the City Hall complex including City Hall and the Municipal and 809 buildings. To meet this directive, several energy efficient measures were implemented:

- Installation of vending machine misers that reduce electric use during non-peak hours of operation.
- Employees were asked to remove portable electric space heaters from their work spaces to reduce electricity demand.
- Installation of daylight optimization controls with trackers and sensors that determine lighting based on available daylight and occupancy of work areas.
- Installation of variable frequency drive on HVAC distribution pump that use only the amount of energy needed to deliver heated or cooled air into a space.
- Installation of economizer controls that make use of outdoor air supply when a building requires cooling and the outdoor air is cooler than indoor air.
- Installation of carbon dioxide sensors that turn on air delivery systems when space conditions reach design limit. Exhaust fans and other HVAC equipment turn on or increase the volume of air movement when somebody is in a workspace.

Benefits

Implementation of the energy efficiency measures not only saves on energy use, it also saves money. It is estimated that the energy efficiency measures will reduce energy consumption by 10% in 2006 and save \$55,000.

Cost

According to the energy walk-thru, implementation of the energy efficiency measures cost approximately \$21,000 and is funded through the city's operating budget.

2. Renewable Energy Program:

Mayor Barrett directed the purchase of renewable energy. In 2006, 10% of City Hall's electricity is provided by renewable wind energy. Through this commitment, the City is designated by the US Environmental Protection Agency as a Green Power Partner.

Benefits

The use of renewable energy reduces both carbon dioxide and particulate matter emissions as compared to the burning of fossil fuels. The City's purchase of renewable wind energy helps to stimulate regional demand for clean, green power. In the long term, use of renewables will improve regional air quality and reduce the economic exposure to rising energy prices. In addition, the use of renewable energy enhances Milwaukee's Green image.

Cost

The renewable energy purchase costs less than \$10,000 and is funded through the city's operating budget.

3. LED Traffic Light Replacement Program:

The City is replacing existing incandescent traffic and pedestrian lights with energy efficient LED lighting at 712 signalized intersections. A total of 184 conversions have been completed. This is a multi-year initiative. LED signals use less energy and have a longer useful life, reducing energy costs by 80%-90%.

Best Practices Survey – Fuels & Vehicles

Alternative Fuels Program:

The City has a total of 135 alternative fuel vehicles (AFVs) which comprise approximately 5% of the vehicle fleet. The AFV breakdown by fuel type includes:

- LPG – 131
- CNG – 1
- Electric – 3

Later this year, the City will be negotiating a new fuel contract that includes the purchase of biodiesel at a 2% blend (B2). The City will convert its full diesel fuel purchase to B2. A total of 923 pieces of equipment are diesel fueled, approximately 35% of the vehicle fleet.

Benefits

Use of alternative fuels improves air quality by reducing mobile source emissions including nitrous oxides, hydrocarbons, carbon monoxide and particulate matter. In addition, reducing petroleum use through alternate sources of energy increases national energy security and lessens US dependence on foreign oil.

Cost

The incremental cost of biodiesel is expected to be \$0.02/gallon. The City's annual diesel usage is approximately 1M gallons. The B2 purchase is expected to cost an additional \$20,000 above the cost of diesel fuel.

Best Practices Survey – City Development and Housing

Mayor Tom Barrett appointed a Commissioner of the Department of City Development who is a green building advocate. City land sales, requests for proposals and current design reviews are all opportunities the City of Milwaukee uses to negotiate more green buildings.

Mayor Barrett has directed an inventory of city regulations to identify barriers to green building and development. An inventory will provide the basis for the creation of appropriate incentives to encourage and stimulate green development. This review will be coordinated by the new Director of Environmental Sustainability.

The Housing Authority of the City of Milwaukee (HACM) was awarded one of six "World Leadership Awards" by the World Leadership Forum for its model of affordable housing that transforms neighborhoods. The World Leadership Forum is a not-for-profit organization that promotes leadership internationally by highlighting the work of exceptional leaders and achievers in categories that make the greatest impact.

In addition, HACM was recently recognized by the Sierra Club for Highland Park: Highland Gardens and Highland Homes naming it one of "America's Best New Development Projects." Sierra Club commended HACM for embracing conservation [and] green building techniques." Highland Gardens, a 114 unit low-income public housing facility was built with a 20,032 square foot modular green roof, made extensive use of recycled materials including windows, cement and flooring, was planted with two rain gardens and uses rain water to flush toilets.

Best Practices Survey – Waste Management and Recycling

The City of Milwaukee, in partnership with the Milwaukee Metropolitan Sewerage District, opened the area's third household hazardous waste (HHW) facility at the City's Lincoln Avenue Self-Help Center located at 3879 W. Lincoln Avenue. Opened in January 2006, the Lincoln Avenue HHW facility offers a convenient, safe, central location for ALL Milwaukee County residents to dispose of hazardous materials. Through regional cooperation and partnership, Lincoln Avenue now accepts disposal of HHW products such as anti-freeze, paint, solvents, asbestos materials, PCBs, dioxins and mercury. This initiative will keep HHW out of residential garbage or dumped illegally into the sewer system or directly into Milwaukee's waterways. The integration of HHW collection with an urban self-help center provides improved access and encourages greater participation in proper HHW disposal. Lincoln Avenue Self-Help offers one-stop convenience for city residents to dispose of all wastes ranging from household trash, recyclables, appliances, furniture, yard waste, used motor oil and hazardous materials. This change establishes Lincoln Avenue Self-Help Center as a leading urban self-help center that "takes it all." It's about convenience, it's about partnership and it's about protecting our environment.

Contact Information:
City of Milwaukee
Mayor Tom Barrett

Contact: Rhonda Kelsey
Title: Policy Manager
Department: Mayor's Office
Email: rkelse@milwaukee.gov
Phone: 414.286.8595