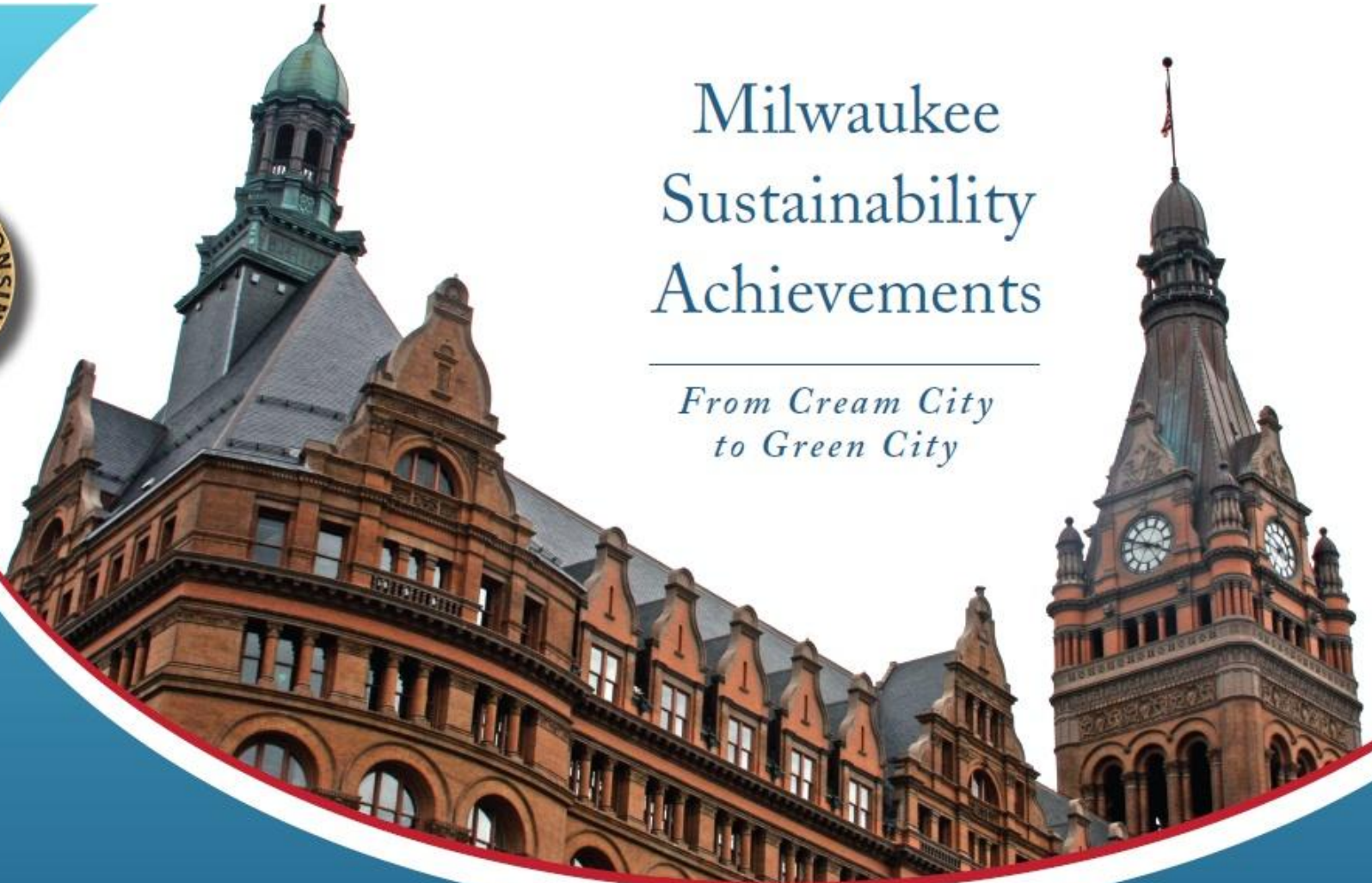




Milwaukee Sustainability Achievements

*From Cream City
to Green City*



Mayor Tom Barrett
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“I want to create an alignment of economic and environmental interests that improve Milwaukee’s quality of life.”

– Mayor Tom Barrett



Mayor Barrett's Environmental Leadership

- Mayor Tom Barrett was named the 2009 “Green Governmental Leader of the Year” by the *Milwaukee Business Journal*
- Milwaukee ranked 12th on SustainLane’s U.S. Cities Sustainability Index
- The City and MMSD win 2011 Leadership in Stormwater Management Award from Great Lakes & St. Lawrence Cities Initiative
- Award winning redevelopment of the Menomonee Valley from contaminated brownfields to a thriving eco-industrial area with renewable energy businesses
- Supporting our manufacturing base with sustainability solutions



- “Sustaining, enhancing, and promoting Milwaukee’s natural environmental assets” is one of the Mayor’s six key goals
- Sustainability implemented throughout city government



History of Green Team

- Mayor Barrett convened the Milwaukee Green Team in 2004
- Green Team issued its recommendations in October 2005
- Four Objectives in Green Team Report
 1. Reduce Stormwater Runoff
 2. Develop Smart Energy Policies
 3. Stimulate a Green Economy in Milwaukee
 4. Implement “Cross Cutting” Strategies that Address Multiple Green Objectives



Office of Environmental Sustainability (OES)

- Mayor Barrett created the Office of Environmental Sustainability to:
 - Implement Green Team recommendations
 - Provide policy guidance on environmental issues
 - Conduct outreach to businesses and residents on the City’s sustainability efforts and enhance Milwaukee’s reputation as a “green” City
 - Seek external funds for the City’s sustainability - \$20 million to date
- Ann Beier appointed first director in June 2006; resigned in 2009
- Matt Howard was appointed in June 2010
- OES staffed at four full-time positions + graduate interns
- Community input and collaboration have been a guiding principle
- OES develops practical solutions to improve the environment and economy



City Sustainability Achievements



2005-Present



Reduce Stormwater Runoff

Green Team Recommendation	Accomplished?
Implement a stormwater fee on impervious surfaces	✓
Increase the City's tree canopy on public rights-of ways	✓
Increase use of native plants as part Sustainable Boulevard Plan	✓
Developed multi-lingual public education materials on stormwater BMPs for residential use	✓
Identify and prioritize investments in stormwater improvements	✓
Distribute washing machine magnets that read "Postpone your laundry when it's raining"	✓



Reduce Stormwater Runoff: City Actions

- Over 13 acres of green roof projects
- City-County revitalization of Bradford Beach contains stormwater retention features
- DPW has planted 25,000 trees since 2005
- The “Green Corridor” initiative on S. 6th St. takes a unique community approach to stormwater management
- The City’s public-private preservation and adaptive reuse project at the Brewery reduces stormwater impacts and is the City’s first LEED neighborhood pilot project
- Milwaukee River Green Overlay Zone
- Stormwater bioretention facilities



RAIN GARDENS IN THE URBAN ENVIRONMENT

A peer to peer training program



Photo courtesy of UWM



Stormwater and Water Policy

- Ann Beier served on State of Wisconsin Legislative Council Committee on the *Great Lakes Water Resources Compact*
- Milwaukee Water Works' *Use Water Wisely* campaign helps customers find and repair water leaks to conserve the water resource
- Currently applying for Coastal Management grant to incorporate green infrastructure standards into our annual street reconstruction program
- MMSD is a great partner in sustainability
 - *Every Drop Counts*
 - *Fresh Coast Sustainable Water Reclamation* guidebook
 - Landfill gas project, many others





Smart Energy Policies

Green Team Recommendation	Accomplished?
Issue Executive Order to reduce energy consumption in city operations by 15% by 2012	✓
Develop energy performance measures for all City departments	✓
Use performance contracting to upgrade City buildings for energy Efficiency (Safety Academy and LED traffic lights)	✓
Purchase renewable energy blocks for City Hall	✓
Pilot LEED certification for City buildings (LEED silver for City Hall)	✓
Purchase alternative fuel and hybrid vehicles for city fleet (28 hybrid vehicles purchased with more on order)	✓
Support balanced transportation systems	✓
Explore adoption of climate protection plan	✓
Identify energy saving opportunities in City Hall complex	✓



Smart Energy Policies: City Facilities

- Mayor Barrett signed Mayor's Climate Protection Agreement in 2007.
- City has funded more than \$1m in energy efficiency projects since 2005, with additional support from ARRA.
- All City traffic lights have been retrofitted with LED technology, and implemented pilot projects for LED streetlights
- OES formed an Energy Reduction Team of facilities managers from all city departments to coordinate energy efficiency efforts.
- Wind turbine to provide 100%+ of power to Port Administration Building
- "Green bag" lunches and training for city staff on sustainability issues

In 2010, the City's electric and natural gas bills would have been nearly \$1,000,000 higher if not for City's energy efficiency efforts and Co₂ emissions are down 9%



Smart Energy Policies: Transportation

- Mayor developed a *Comprehensive Transit Strategy* including a *Downtown Streetcar* to help Milwaukee compete as global city.
- DPW's fleets include 28 hybrid vehicles with more on order
- DPW has purchased Compressed Natural Gas (CNG) refuse trucks and refueling stations & all City diesel vehicles using biodiesel
- DPW implemented the first Eco-Driving Program in the nation
- Milwaukee Fire Department began using passenger vans to transport workers to off-site training sessions, rather than fire engines.
- DPW wins 2010 Government Green Fleet Award
- OES will be installing up to 5 electric vehicle recharging stations throughout the City in 2011-2012



Milwaukee Energy Efficiency Program

- Me² helps City of Milwaukee homeowners and businesses pay for energy efficiency improvements as they save on their energy bills using innovative financing options
- Me² provides homeowners with step-by-step assistance and financial incentives to upgrade their home
- Me² helps you businesses finance energy efficiency projects to improve their income and cash flow from day 1
- \$12m competitive grant from US DOE to leverage \$40m in private capital for Milwaukee homeowners and businesses
- Community Workforce Agreement to create good paying green jobs for Milwaukee residents



Green Economy



Green Team Recommendation	Accomplished?
Increase “Branding” of Milwaukee as a sustainable city	✓
Inventory existing green technology services market in Milwaukee	✓
Provide start-up financing and tax incentives for businesses in green technology fields	✓
Catalyze the formation of an energy technology cluster	✓
Promote Green Tier and other sustainability resources to Milwaukee manufactures	✓
Research, develop, build, and market green technologies in Milwaukee (i.e. wind turbines, photovoltaic cells, green roofs, etc)	✓
Develop a Green Corridor or eco-industrial park to attract green technologies	✓
Work with Chicago and Madison to establish a Green Network Triangle (Milwaukee Shines and Me ² partnership with Madison)	2/3 ✓



Milwaukee Shines

- Milwaukee named one of 25 US DOE *Solar America Cities* in 2008
- Over 1.1 megawatts of solar power being generated by homes, businesses and government in Milwaukee
- Solar installer workforce tripled in less than three years (2007-2010)
- Solar Hot Water Business Council growing an industry cluster to manufacture solar products in Milwaukee
- Over 80 kilowatts of total solar on City's Central Library, Central Repair Garage and Recycling Education Center (which also uses geothermal)
- Seven MFD engine houses using solar hot water systems
- Solar financing program for city residents makes solar more affordable



ECONOMY
ENERGY
ENVIRONMENT

ME3 Sustainable Manufacturing Initiative

- Milwaukee Economy, Energy and Environment is a technical assistance partnership program for small and medium-sized manufacturers
- City program to help small and medium-sized manufacturers cut costs, reduce negative environmental impacts, and increase global competitiveness
- Comprehensive, high value review of entire manufacturing process and related practices
 - Coordinated Diagnostic and Technical Assessments
 - Implementation Support
 - Training and Continuous Improvement
- Partners with WMEP, UWM and many others





“Cross Cutting” Strategies

Green Team Recommendation	Accomplished?
Develop a Green Plan for the City	1/2 ✓
Develop incentives for businesses to go “Green”	✓
Review regulations to remove barriers to green	✓
Adopt the Sustainable Design Guidelines for the Menomonee Valley	✓
Implement a “Green Festivals” initiative to increase recycling at Lakefront festivals	✓
Increase citywide recycling rates and participation	✓
Develop construction site recycling initiatives	✓
Collaboration with MPS and educational institutions	✓



Other Initiatives

- Milwaukee recently named one of 24 cities globally as an IBM Smarter City in recognition of the City-supported urban agricultural
- *The Recycle For Good* campaign increased recycling tonnage in 2010 and introduced Single-Sort recycling to make recycling easier in 2011
- Summer youth program and workforce agencies provide pathways to green jobs
- Inner Harbor Redevelopment
- Provided energy efficiency stimulus grants to 11 manufacturers, saving them over \$500,000 annually





What's Next?

- Build on Green Team foundation and successes
- Continue to drive sustainability through the organization
- Continue to work with residents and businesses on sustainability priorities

Sustainability Planning



Green Team 2.0



What You Can Do

1. Post your feedback and suggestions on our *Ideas Board*
2. Practice sustainability in your workplace, neighborhood, and home
3. Collaborate with the City and each other to leverage our collective vision and resources
4. Help Tell Milwaukee's Sustainability Story!



An Open Door

Office of Environmental Sustainability

(414) 286-8317

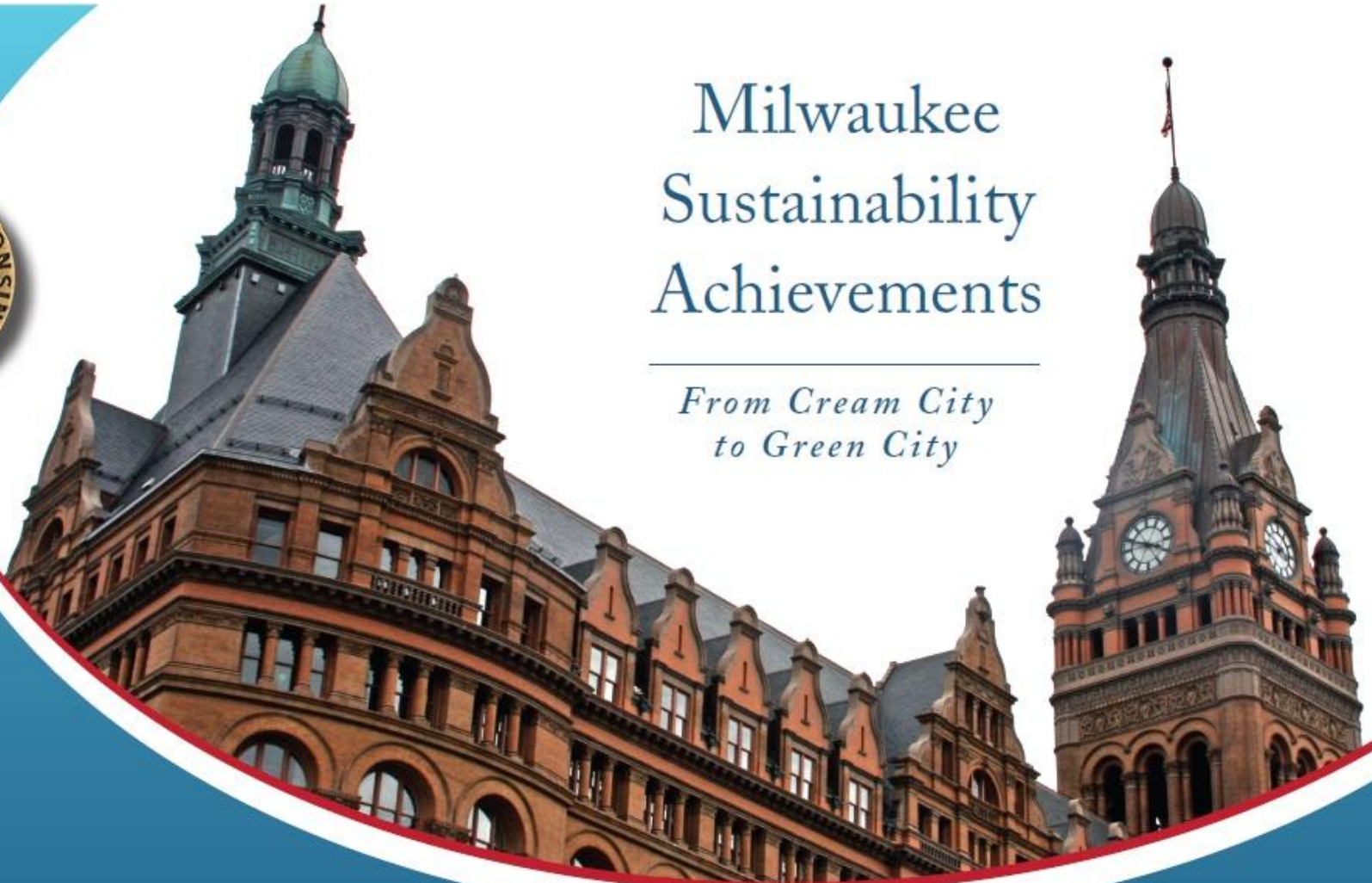
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