

Sustainability Plan

January 2014



City of Monona Sustainability Plan January 2014

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Appendix A Sustainability Resolution (12-03-1843)

Introduction

The City of Monona is committed to being a resilient and sustainable community, with a quality of life and strength of economy that meet the desires of all who live, work, and play within its boundaries. As part of this commitment, the city has undertaken numerous sustainability initiatives, including the formation of a Sustainability Committee and adoption of a Sustainability Resolution.

The adoption of the Sustainability Resolution in March 2012 was the start of establishing sustainability principles as the norm in city planning, policies, and procedures. The Monona Sustainability Plan (MSP) was developed based on the principles in the resolution. The MSP contains guiding visions, measurable objectives, and targeted strategies (plans of action) intended to help the city practically implement ideas for operating more efficiently and sustainably.

The MSP is based on input from city committees, staff, residents, nonprofit organizations, and businesses and encompasses all aspects of city operations. Strategies will be taken on by stakeholders or groups of stakeholders, with progress monitored by the Sustainability Committee.

The city's definition of sustainability embraces the needs, concerns, and well-being of all community members, and also relies on community members to share ownership and responsibility to work towards the same goals. Sustainability goals cannot be reached by the Sustainability Committee alone but will be embedded in the work of all committees and departments.

History

Sustainability work in Monona has significantly increased since the formation of the Ad Hoc Sustainability Committee in 2007. In addition to laying a foundation for the committee's own goals, role, organizational structure and procedures, the Ad Hoc committee reached out to both city staff and the Monona community with various educational opportunities regarding sustainability. It arranged a one-day training for several city staff in The Natural Step, an internationally regarded, scientifically based, and practical framework that enables organizations of any size to apply sustainable practices, as well as measure the impact of their actions. It also began a tradition of public outreach and education at Monona's annual Memorial Day Parade and organized three Green Monona Tours to showcase state-of-the-art sustainable practices being used by local residents and business owners.

In 2010, the Ad Hoc Sustainability Committee became a permanent standing committee. That same year, the City of Monona pledged to become one of the State of Wisconsin's Energy Independent Communities, which required the development of a 25x25 Plan. The goal of the plan was to shift 25 percent of the electricity and 25 percent of the transportation fuels used in city operations to renewable resources by 2025. Block grant funding helped the city initiate many energy-saving improvements to its buildings. Two electric vehicle-charging stations were installed and two electric vehicles were added to the city's fleet. In 2013, the largest municipal solar array in Wisconsin has been installed on the roofs of Monona's city buildings to help the city meet its 25x25 Plan goals.

Community-targeted actions of the Sustainability Committee have included welcoming Focus on Energy's citywide offer to provide and install free energy and water saving devices in the homes

of willing residents. The Sustainability Committee also authorized the design of a Green Monona Map to recognize individuals and businesses that are taking initiatives to become more sustainable.

Water became a strong focus in 2012 as the committee supported two nonprofit-initiated sustainability efforts, a yearlong Monona Water Conservation Challenge to encourage households to voluntarily reduce water use, and a Lake Monona Water Walk to honor and learn more about Monona's waterways. It also sponsored a Stormwater Paddle Event to promote greater appreciation, understanding, and stewardship of Monona's most valued, yet fragile, resource.

In March 2012, the City Council took a further step toward integrating sustainability into future actions by adopting a Sustainability Resolution (Resolution 12-03-1843, see Appendix A). The Resolution quickly attracted the attention of the Wisconsin Department of Natural Resources (DNR), which invited Monona to become one of ten Green Tier Legacy Communities. The Wisconsin DNR facilitates quarterly meetings which enable participating Green Tier municipalities to support each other's sustainability work, and it also provides access to DNR expertise and technical assistance.

Sustainability Principles and Guidelines

With the adoption of the Sustainability Resolution (see Appendix A) by the City Council in March 2012, the city embraced one commonly held general principle of sustainability identified in Brundtland's 1987 Report of the World Commission on Environmental Development: Our Common Future. This Sustainability Principle, adapted to fit Monona's municipal context, is also applicable to the MSP and states:

"...practicing sustainability means working to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors..."

The MSP recognizes that all municipal decisions are made within the context of the nesting of economic systems within social systems within the environmental system. Finding solutions that respect both current and future community members' needs and that are resilient to changing circumstances presents both challenges and opportunities. These can be met most sustainably when all systems involved are carefully considered and when decision-making is informed, collaborative, flexible, and creative.

To assist decisions, the following four Sustainability Guidelines are also being embraced in the MSP as the basis for the development and implementation of the city's plans, policies, and procedures:

- Reduce dependence on fossil fuels and extracted underground metals and minerals.
- Reduce dependence on chemicals and other manufactured substances that can accumulate in nature.
- Reduce dependence on activities that harm life-sustaining ecosystems.
- Reduce barriers to achieving present and future human needs fairly and efficiently.

Together, the above principle and guidelines express the primary values that underpin the MSP.

Development of the Sustainability Plan - Public Process

In July 2013, the Sustainability Committee began to work on the Monona Sustainability Plan for 2014, with the intent of both defining Monona's overall vision of sustainability, as well as outlining specific objectives and strategies to guide progress toward that vision over the course of the next five years. The city is consulting with Madison Environmental Group, LLC to work collaboratively with the city, community, stakeholders, and other governmental agencies to develop the MSP.

Community engagement in the creation of a sustainability plan helps make the process acceptable to all stakeholders; engagement has been encouraged. To this end, all representatives of city committees, boards, and commissions were invited to attend a September 18, 2013 forum to discuss and prioritize objectives and strategies. Following that, community members were invited to a public meeting held on October 2, 2013 to both receive information about development of the plan and give their input. Community members were also invited to share their reactions to a draft of the plan in an online survey conducted prior to the plan's presentation to the City Council. Further formal opportunities for stakeholder engagement are anticipated as the plan is implemented. Additional informal feedback from the community will always be welcomed by the Sustainability Committee.

Plan Overview

The 2014 MSP contains six major sections. The first addresses general sustainability and is followed by five focus areas that correspond to those identified in the Green Tier Legacy Communities Charter. The six major sections are:

- General Sustainability
- Land Use
- Water
- Energy
- Transportation
- Solid Waste

Each section begins with a vision statement, followed by specific measurable objectives that have been divided into two groups. "Municipality" objectives pertain primarily to the city's public lands, buildings, and operations. "Community" objectives more directly affect and involve private citizens and businesses. Both sets of objectives reflect overlapping interests, however, and are best met through the thoughtful collaboration of all interested stakeholders.

"Charts that show the proposed strategies (specific plans of action) for meeting each focus area's objectives are included in the Appendix, along with baseline data and target goals."

Charts will be created during 2014 that show the proposed strategies (specific plans of action) for meeting each focus area's objective. These will be included in the Appendix, along with baseline data and targets for the objectives.

Future Work

The City anticipates that the core tenets of the Monona Sustainability Plan (MSP) will remain viable for many years to come. While objectives have been selected with a five-year revision cycle in mind, annual reviews at the beginning of annual budget cycles (to incorporate changes in progress data, funding opportunities, community challenges, new scientific findings, etc.) could help prompt and/or inform revisions or priority shifts. The Sustainability Committee will oversee any reviews or revisions of the MSP.

To implement the MSP in 2014, it will be necessary to gather and analyze valid baseline data so that appropriate targets can be set. To find ways to do this while minimizing the added work for city committees and staff may require developing new procedures for gathering existing data, using multiple indicators rather than a single one, or relying on qualitative measures where quantitative measures are not available or appropriate.

Another task for 2014 will be to develop a procedure to ensure the MSP becomes a living document with the community and its representatives engaged in keeping it vital and robust. A review at the beginning of each year of strategies implemented and progress made will help evaluate the MSP. A formal approach should be developed to regularly share the city's progress and get input from the community. In addition, sustainability must be considered in the annual budget process as well as during the rest of the year in the work among staff and committees.

The City of Monona and its Sustainability Committee have achieved numerous sustainability successes, many of which have been due to high levels of commitment of all involved parties. To build upon these successes, continuing this degree of individual and group dedication is crucial. Thus, it is important for the city to take advantage of opportunities to partner with other organizations and to find ways to encourage community members to engage more fully in their city's sustainability efforts. To build a thriving and healthy community in Monona, everyone must come together to do their part.

Visions and Objectives

General Sustainability

Vision

The community of Monona, including its government, residents and businesses, strives to meet the needs of the present without compromising the resources available for future generations. Monona shares a culture that embraces, is vested in, and uses best practices for sustainable living.

To support and sustain a community the environment, society and economy must all be stable and healthy. The decisions made today in the City of Monona have far-reaching and long-lasting consequences and should be made with great consideration of their impacts on our natural systems, the economy and the people living now and in the generations to come. Adopting sustainability as a principle of decision-making for the City of Monona will serve as both a framework for city decision-making and a model for the citizens of Monona. It will encourage a strong local economy while protecting the natural systems in which residents live, work and play. Moving toward a more sustainable future is also critical for attracting new residents and businesses.

Community

	Objective
GC1*	Raise the sustainability awareness of Monona residents
GC2	Increase percentage of residents that have implemented sustainable practices, such as those listed in other sections in this plan
GC3	Raise the sustainability awareness of Monona businesses
GC4	Increase number of businesses that have implemented sustainable practices, such as those listed in other sections in this plan

^{*} GC1 = General Community objective 1

	Objective
GM1*	Ensure sustainability is considered in the decision process, including the city budget process
GM2	Raise the sustainability awareness of citizen representatives to city committees
GM3	Raise the sustainability awareness of city employees

^{*} GM1 = General Municipality objective 1

Below are a few examples of general strategies that have already been initiated to make Monona a more sustainable city.

- The Sustainability Committee was formed in 2010.
- The Sustainability Committee developed the "Green Monona Map" which acknowledges businesses and residents in the community that are taking initiatives to become more sustainable.
- Monona public library has a sustainability section, where community members can find information about various sustainability topics.
- The Natural Step Monona organizes Green Tuesdays and Thursdays to educate residents about sustainability.
- Many members of the city staff have gone through sustainability training.

Land Use

Vision

The city encourages redevelopment and high density development as a means to provide access to housing, economic development opportunities, recreation, social interaction, and other basic needs while protecting the natural environment, health, safety, and overall quality of life. The city is committed to keeping large areas of land open for conservation and recreational uses.

Monona is a land-locked community that has been extensively developed throughout the years, leading to a strong neighborhood fabric and few available greenfield sites. Land use in the City of Monona encompasses both the built and the natural environment. How the land is used has a direct impact on residents' health, the water and other natural resources. For example, high density and mixed-use development leads to less transportation demand and thereby lowered consumption of fossil fuels and decreased air-pollution. Another example is the use of synthetic chemicals for landscaping, which has a negative impact on natural habitats, human health and the state of our lakes.

Community

	Community	
	Objective	
LC1*	Integrate sustainability considerations in the evaluations and decisions made by Plan Commission (e.g. landscaping, building performance)	
LC2	Integrate sustainability components in zoning code (e.g. reduction of impermeable surfaces)	
LC3	Integrate sustainability components in comprehensive plan (e.g. efficient use of resources, mixed-use centers, high density/compact/transit oriented development, walkability)	
LC4	Increase proximity and walkability to stores, restaurants and other amenities (Walkscore)	
LC5	Maintain percentage of land devoted to open space/parks/recreation	

^{*} LC1 = \underline{L} and use \underline{C} ommunity objective $\underline{1}$

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	Objective	
LM1*	Maintain protection and restoration of natural habitats including wetlands	
LM2	Integrate sustainability in landscape management	
LM3	Improve stormwater reduction/management	

^{*} LM1 = \underline{L} and Use \underline{M} unicipality objective $\underline{1}$

Below are a few examples of strategies for Land Use that have already been initiated to make Monona a more sustainable city.

- Monona has been certified as a Tree City USA for 23 years.
- Arbor Day Tree Planting Day events have been arranged—coordinated volunteer planting of trees in local parks.
- Organic compost is being used in the parks as fertilizer.
- Government "right of way" are mown or cleared only for safe sightlines or to remove invasive species.
- The current Comprehensive Plan encourages the development and redevelopment of compact, highly planned mixed-use activity centers that include shopping, employment, housing, and recreation opportunities.
- Known contaminated properties have been inventoried for reuse planning.
- As part of the landscaping standards, the zoning code includes canopy tree requirements, set as a function of the amount of parking proposed for new development.

Water

Vision

Monona citizens, employees and elected officials recognize that the abundant groundwater and important surface water resources of our area must be protected. Everyone in the community strives to use as little water as possible in their daily activities both indoors and out-of-doors. Clean rain water and snow melt is captured on the land and allowed to infiltrate. Water that does run off to storm sewers and then to the lake, or that moves directly to waterways is as clean as technology and management practices allow.

Clean water is an essential human need. Monona is lucky to be surrounded by plentiful sources of surface water and groundwater. The state of our lakes and waterways is influenced by the runoff from our built environment. Large quantities of chemicals are used to first pre-treat the water to drinking quality. This process also consumes a high amount of energy. About 25% of the municipality energy consumption goes to the city water utility, to get clean water from the well to the consumers.

Community

	Objective
	Increase water efficiency and conservation by residents
WC1*	WC1a: Decrease residential groundwater consumption (gallons per household)
WC2	Increase water efficiency and conservation by commercial and industrial properties
WC3	Decrease quantity of stormwater runoff to lakes
WC4	Decrease pollutants and debris in stormwater runoff

^{*}WC1 = \underline{W} ater \underline{C} ommunity objective $\underline{1}$

	Objective
XX / X / 1 / 4	
WM1*	Decrease groundwater consumption
WM2	Maintain percentage of groundwater lost in distribution system
WM3	Decrease quantity of stormwater runoff to lakes
WM4	Decrease pollutants and debris in stormwater runoff
	Continue participation in the Wisconsin Water Star Program and improve Monona's
WM5	score and ranking

^{*} WM1 = $\underline{\mathbf{W}}$ ater $\underline{\mathbf{M}}$ unicipality objective $\underline{\mathbf{1}}$

Below are a few examples of strategies for Water that have already been initiated to make Monona a more sustainable city.

- 2012 was proclaimed the "Year of Water" with several activities during the year including the "Monona Water Walk".
- A "Water Conservation Challenge" for residents was carried out during 2012, a collaboration between the non-profit organization The Natural Step Monona and the City of Monona.
- A stormwater study project has been launch, surveying existing stormwater outfalls and prioritizing a repair/replacement schedule.
- Monona has become a Wisconsin Water Star Bronze.
- Monona has a Water Sense Partnership with the EPA.
- Monona has established a partnership with Marquette University to create monona.H2Oscore.com. The website allows residents to translate their water bills into a gallons consumed format to make water conservation easier to track.

Energy

Vision

The city encourages and assists public and private energy users to reduce overall energy use and bring Monona closer to producing all of its energy needs on its own. Monona is a pioneer in adopting renewable energy sources to power municipal buildings, which is meant to set an example for the community.

How we produce and consume energy, especially energy based on fossil fuels, has long been of major concern for environmental reasons in the US and the rest of the world. Unsustainable management of energy production results in climate change, air pollution, and ecosystem destruction. Using less energy not only reduces the impact on the environment but also saves money.

Community

	Objective
	Increase energy efficiency and conservation by residents
EC1	EC1a: Decrease residential electricity consumption (kWh per household)
	EC1b: Decrease residential natural gas consumption (therms per household)
EC2	Increase energy efficiency and conservation by commercial and industrial properties

^{*} EC1 = $\underline{\mathbf{E}}$ nergy $\underline{\mathbf{C}}$ ommunity objective $\underline{\mathbf{1}}$

	Objective
EM1*	Decrease total electricity consumption (kWh)
	EM1a: Decrease building electricity consumption (kWh)
	EM1b: Decrease street lighting electricity consumption (kWh)
	EM1c: Decrease water & other utility electricity consumption (kWh)
EM2	Increase percentage of energy consumption from renewable sources
EM3	Decrease total natural gas consumption (therms)

^{*} EM1 = Energy Municipality objective $\underline{1}$

Below are a few examples of strategies for Energy that have already been initiated to make Monona a more sustainable city.

- The city collaborated with Focus on Energy to offer an Express Energy Efficiency Program to residents.
- A LED exterior lighting retrofit project has been implemented.
- HVAC systems upgrades have been installed in city buildings.
- A 157 kW solar project involving the installation of solar arrays on four facility buildings is under construction. The solar arrays will produce more than 210,000 kilowatt-hours of clean energy per year, equating to 30% of the buildings' combined electricity usage.
- CNG (compressed natural gas) retrofit for city fleet vehicles is being investigated.

Transportation

Vision

Monona provides and maintains a multi-modal transportation system for users of all ages, abilities, and income levels in addition to being connected to a regional transportation network. Community members make sustainable transportation choices to and from housing, employment, recreational, social, and daily-necessity centers.

The greenhouse gas emissions from the transportation sector make up about 23% of the total emissions in the US. Choosing alternative and sustainable transportation options such as biking and taking public transportation reduces the individual carbon footprint. Moreover, a well managed transportation system in a city can strengthen the community bonds while improving the air quality.

	7
Community	1

	Objective
TC1*	Increase percentage of residents using alternative transportation* to destinations within Monona (e.g. library, pool, city hall, community center, stores, restaurants)
TC2	Increase percentage of students (K-12) using alternative transportation [#]
TC3	Increase percentage of residents using alternative transportation* for commuting

^{*} $TC1 = \underline{T}$ ransportation \underline{C} ommunity objective $\underline{1}$

Municipality

	Objective
TM1*	Increase percentage of city employees using alternative transportation [#] for commuting
11/11	increase percentage of etty employees using atternative transportation for commuting
TM2	Decrease greenhouse gas emissions from work related (city business) transportation

^{*} TM1 = Transportation Municipality objective 1

Below are a few examples of strategies for Transportation that have already been initiated to make Monona a more sustainable city.

- The reconstruction of Monona Drive added bike lanes.
- The city has hosted a children's Bike Safety Day for several years.
- Monona PTO, Winnequah School and the City of Monona each year arrange a "Walk/Bike to School Day"
- Two Electric Vehicle Charging Stations are installed near the Community Center in collaboration with MG&E.
- The Monona Transit route has been extended.

[#] Here "alternative transportation" includes, but is not limited to: walking, biking, busing, carpooling.

Solid Waste

Vision

Community members of Monona have access to infrastructure that allows effective and efficient reduction, reuse, composting, and recycling of waste. The community is a leader in conserving resources and protecting the environment through using materials responsibly, recycling and proper management of wastes.

With increasing economic development and consumption, the waste produced within a city has historically been increasing. Improper waste management can lead to the spread of diseases and other health problems from substances leaking into nature. Unsustainable management of waste is a source of pollution in water, air and land. A local problem for Monona is that the Dane County Landfill is nearly full. Constructing an expansion to the existing landfill will be both difficult and costly.

Community

	Objective
SC1*	Decrease total solid waste collected (lbs/household)
SC2	Increase percentage of solid waste being recycled (or otherwise diverted)
SC3	Increase percentage of materials from construction and deconstruction diverted from landfill
SC4	Safe disposal of waste products not included in curb pick-up, such as medical, hazardous and electrical waste is readily available and utilized

^{*} $SC1 = \underline{S}$ olid waste \underline{C} ommunity objective $\underline{1}$

	Objective
CM1*	Degrees total call'd wests calleged
SM1*	Decrease total solid waste collected
SM2	Increase percentage of solid waste being recycled (or otherwise diverted)
	Increase percentage of materials from construction and deconstruction diverted from
SM3	landfill

^{*} SM1 = Solid waste Municipality objective 1

Below are a few examples of strategies for Solid Waste that have already been initiated to make Monona a more sustainable city.

- A Med-Drop Collection has been arranged- the city helped promote a medication dropoff day at a local pharmacy.
- The city has provided an eCycle an electronic waste drop-off day in collaboration with Monona Grove High School.
- The city is improving options for recycling at events and in parks.

Appendix A: Sustainability Resolution (12-03-1843)

Resolution No. 12-03-1843 Monona Common Council

A COMMITMENT TO SUSTAINABILITY IN THE CITY OF MONONA

WHEREAS, the environment, society, and economy must all be stable and healthy to support and sustain a community; and,

WHEREAS, a commitment to local and regional cooperation is essential for stewardship of the natural systems that sustain us; and,

WHEREAS, the decisions made today in the City of Monona have far-reaching and long-lasting consequences and should be made with great consideration of their impacts on our natural systems, the economy, and people living now and in the generations to come; and,

WHEREAS, practicing sustainability means working to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors; and,

WHEREAS, adopting principles of sustainability as a principle of decision-making will serve as both a framework for city decision-making and a model for our citizens, encouraging a strong local economy while protecting the natural systems in which residents live, work, and play; and,

WHEREAS, moving toward a more sustainable future is critical for attracting new residents and businesses; and,

WHEREAS, the City of Monona adopts endorses the following four Sustainability Guidelines as a basis for the development and implementation of the city's plans, policies and procedures.

- 1. Reduce dependence on fossil fuels and extracted underground metals and minerals;
- Reduce dependence on chemicals and other manufactured substances that can accumulate in Nature;
- 3. Reduce dependence on activities that harm life sustaining ecosystems; and
- 4. Reduce barriers to achieving present and future human needs fairly and efficiently.

WHEREAS, these guidelines have been has proven to be effective by the experience of many cities in Wisconsin and in the United States and over 75 cities worldwide; and

WHEREAS, it has been demonstrated that the application of these principles can reduce expenses and save taxpayer dollars; and,

WHEREAS, the City of Monona Sustainability Committee has recommended that these principles be adopted by the City of Monona as its guiding sustainability framework.

NOW, THEREFORE, BE IT RESOLVED that the City of Monona Common Council accepts the recommendation of the Sustainability Committee to adopt the Sustainability Guidelines described herein, and agrees to apply these principles in its planning, policy-making and procedures.

Adopted this 19th day of March, 2012.

BY ORDER OF THE CITY COUNCIL

CITY OF MONONA, WISCONSIN

Robert E. Miller

Mayor

ATTEST:

Joan Andrusz City Clerk

Approval Recommend By: Sustainability Committee, 2/16/12

Council Action:

Date Introduced: 3-5-12 Date Approve: 3-19-12