

Energy Action Team Report

November 25, 2014

BACKGROUND

In the fall of 2013, the Natural Resources Committee expressed an interest in exploring long-range energy and green initiative strategies for Ozaukee County. Over the last year, significant progress has been made towards this goal, as shown in the timeline below:

October 2013	The Natural Resources Committee requested that UW-Extension Community Development Educator Kate Pawasarat investigate existing green initiatives associated with Ozaukee County government operations and facilities.
November 2013	The Natural Resources Committee reviewed a UW-Extension report summarizing current and recent county government projects and practices relating to energy efficiency, water conservation, waste management, and sustainable design.
January 2014	County administration and staff met with We Energies and Focus on Energy to discuss county energy use and potential opportunities for energy saving projects and initiatives.
March 2014	The Natural Resources Committee reviewed a summary of energy use at three of the largest Ozaukee County facilities – the Administration Center, Justice Center, and Lasata Care Center.
April 2014	The Natural Resources Committee reviewed existing goals, objectives, policies, and programs related to energy use and green initiatives in the county’s Comprehensive Plan and discussed options for developing a plan of action for moving forward.
June 2014	The Ozaukee County Board of Supervisors passed Resolution 14-16 establishing an Ozaukee County Energy Action Team, charged with: <ul style="list-style-type: none">• Assessing historical and current energy use associated with county government operations;• Evaluating and recommending energy goals, practices, and policies; and• Developing a plan of action to implement energy-related projects and initiatives
July 2014	The Energy Action Team was formed and met for the first time.
October 2014	Ozaukee County was awarded a \$5,000 grant from the State Energy Office for energy planning purposes.

November 2014

The Energy Action Team developed a set of energy-related goals for county government operations and facilities and outlined a process for action planning and implementation.

ENERGY ACTION TEAM WORK

The Energy Action Team includes county department heads and staff from Finance, Highway, Land and Water Management, Maintenance, Planning and Parks, Transit, and UW-Extension, representatives from We Energies and Focus on Energy, Ozaukee County Supervisor Jennifer Rothstein, and County Administrator Tom Meaux.

Individuals who have contributed to the team's work include:

Gerard Behlen

Jon Edgren

Monte Hale

Joe Hicks

Andy Holschbach

Andrew Lamb

Jeff Mackey

Tom Meaux

Kate Pawasarat

Jennifer Rothstein

Chris Seitz

Andrew Struck

Jason Wittek

In the five months since the Energy Action Team was formed, the group has made considerable progress in its three areas of focus:

- Assessing historical and current energy use associated with county government operations;
- Evaluating and recommending energy goals, practices, and policies; and
- Developing a plan of action to implement energy-related projects and initiatives

Resolution 14-16 specifies that the Energy Action Team provide a report to the Natural Resources Committee with recommendations for 2015 by its December 4, 2014 meeting. The status of the team's progress and recommendations for 2015 and beyond are provided in this report.

1 ASSESSING ENERGY USE

The Energy Action Team has developed preliminary estimates of electricity, natural gas, and fuel use associated with county government operations. This has involved the review of approximately 75 We Energies and Cedarburg Light and Water accounts and county fuel usage reports. Preliminary estimates indicate that the county spent over \$2 million on electricity, natural gas, and fuel in 2013.

More detailed information on energy use at the county's largest facilities, including the Administration Center, Justice Center, and Lasata Care Center has been collected and analyzed as well. Overall, energy use at each of the three facilities has decreased over the last ten years, with the greatest decreases occurring at the Justice Center and Administration Center. Based on county utility data and information provided by EPA Energy Star Portfolio Manager, the Justice Center saw a 24% decrease in weather normalized energy use intensity from 2004 to 2013 and the Administration Center saw a 22% decrease during the same time period.

In addition, the county was awarded a \$5,000 grant from the State Energy Office in October 2014 for energy planning purposes. The money will be used to hire an intern who will help to compile a baseline of energy consumption of all county buildings, vehicles, and infrastructure. Energy data for county operations and facilities will be entered and stored in EPA Energy Star Portfolio Manager, an online energy management and tracking tool, which will be used to measure the county's progress in energy reduction and savings and to examine trends in energy use over time. The team also plans to track water use associated with county facilities.

2 EVALUATING AND RECOMMENDING GOALS

The Energy Action Team began its process for evaluating and recommending goals by looking at the county's existing work to conserve energy and promote sustainability. Many Ozaukee County departments already take steps to implement energy efficiency and conservation measures that have reduced operating costs and have improved the efficiency of county buildings and facilities.

For example, significant retrofits to the heating, ventilation and air conditioning systems at both the Justice Center and Administration Center have occurred within the last five years. At the Lasata Senior Living Campus, public urinals have been converted to automatic flush units to save water. The Highway Department incorporates the reuse of a variety of materials in its operations, including used oil, asphalt pavement millings, and slag. The Ozaukee County Transit Services Building, constructed in 2012, includes a variety of energy efficiency and stormwater management components that were incorporated into the facility's design. This work provides a strong foundation on which the county can build and expand.

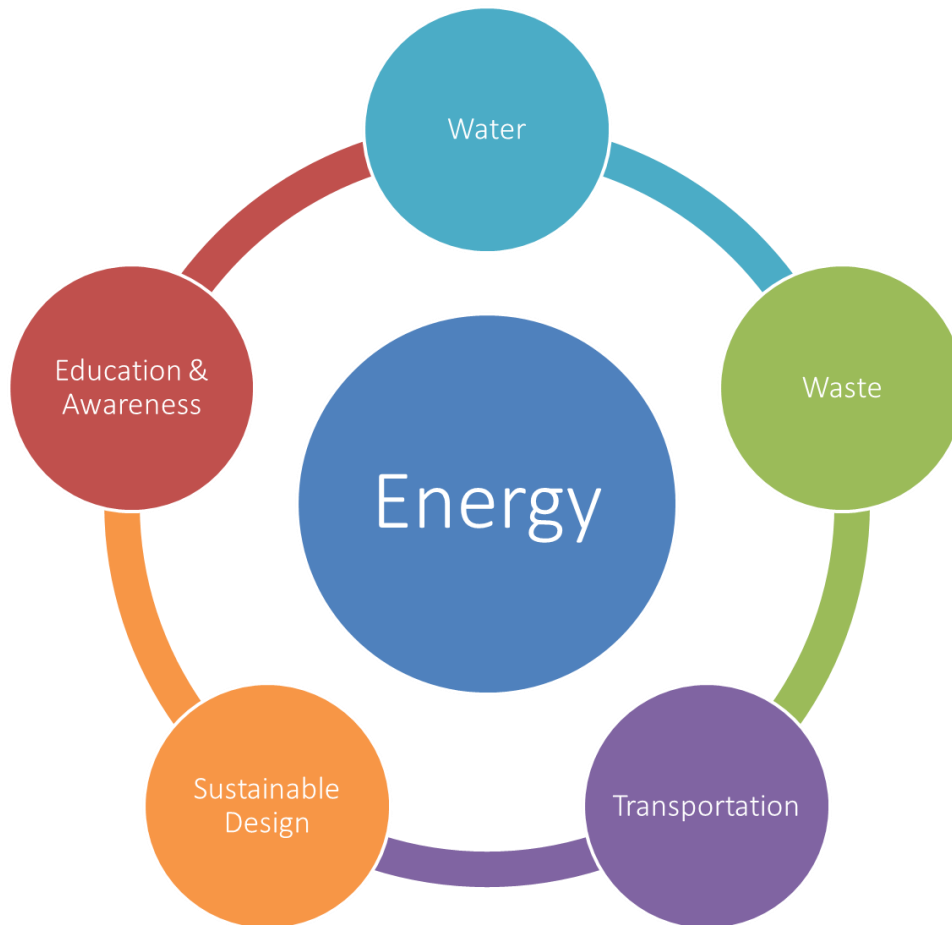
In addition, the team reviewed county government capital improvement projects for 2015-2019 to better understand existing plans and opportunities for energy conservation and sustainability in the coming years. One of the most significant opportunities for energy efficiency improvements is the Lasata Care Center's \$10 million renovation project. This project is a prime opportunity for the county to coordinate with Focus on Energy and take advantage of available energy incentives while making significant improvements to the facility.

The team also reviewed and discussed examples of energy and sustainability goals and policies, looking at the work of other nearby counties and municipalities, the Focus on Energy Practical Energy Management Guide, examples of state and national energy-related programs and frameworks, and Ozaukee County's own Comprehensive Plan.

Following this review, the team brainstormed a list of many different potential goals, projects, and policies for Ozaukee County. This list was refined to six key areas of focus:

- Energy (primary focus)
- Water
- Waste
- Transportation
- Sustainable Design
- Education and Awareness

Energy Action Team Scope and Areas of Focus



Although energy is the primary focus of the group, the team decided over the course of several meetings that a broader approach that also included related areas such as water, waste, and transportation would make the most sense moving forward.

After identifying its scope and key areas of focus, the team developed a policy statement and six goal statements. The team recommends that these goal statements be used to develop concrete targets, objectives, policies, and programs, ultimately resulting in an energy/sustainability plan for county government operations and facilities.

Policy Statement

Ozaukee County is committed to economic and environmental stewardship to improve the quality of life for its current and future residents and will strive to be a role model in the development and operation of sustainable and energy efficient county government facilities and programs.

Energy

GOAL STATEMENT: Reduce energy use associated with county government operations.

Water

GOAL STATEMENT: Promote water conservation and stormwater best management practices.

Waste

GOAL STATEMENT: Promote the reduction, reuse, and recycling of resources as an alternative to landfill-bound waste.

Transportation

GOAL STATEMENT: Explore opportunities for reducing fuel usage by county government vehicles.

Sustainable Design

GOAL STATEMENT: Promote the use of energy incentives and LEED standards in new construction, renovations, and equipment replacement.

Education & Awareness

GOAL STATEMENT: Increase knowledge and awareness among county employees and the residents of Ozaukee County on sustainability and energy saving programs and practices.

3 DEVELOPING A PLAN OF ACTION

To develop a plan of action, the Energy Action Team recommends utilizing a framework similar to the one used to develop the county's Comprehensive Plan. For each of the six goal statements, the team will work to develop more detailed objectives, policies, and programs.

Definitions of Goals, Objectives, Policies, and Programs

Source: *A Multi-Jurisdictional Comprehensive Plan for Ozaukee County: 2035*

GOALS:	Broad and general expressions of a community's aspirations, towards which the planning effort is directed. Goals tend to be ends rather than means.
OBJECTIVES:	More specific targets, derived from goals and necessary to achieve those goals. While still general in nature, objectives are more precise, concrete, and measurable than goals.
POLICIES:	Rules or courses of action necessary to achieve the goals and objectives from which they are derived. They are precise and measurable.
PROGRAMS:	A system of projects or services necessary to achieve plan goals, objectives, and policies.

As the team works to develop objectives, policies, and programs, it will also consider state and national programs and frameworks to either draw from for ideas or to participate in as a county. Examples include Eco-municipalities and the Natural Step framework, Green Tier Legacy Communities, the US Department of Energy Better Buildings Challenge, Energy Star Certification and many others.

The team's action planning process is expected to occur during the first half of 2015.

NEXT STEPS

There are several Energy Action Team efforts that are already planned for 2015. First, applications are currently being reviewed for an Energy Intern who will help to compile a baseline of energy consumption of all county buildings, vehicles, and infrastructure and assist in the team's action planning process. The Energy Intern will work approximately 300 hours during the first half of 2015.

Second, the Energy Action Team is coordinating with We Energies to have Level II energy audits performed at the following Ozaukee County facilities in 2015:

- Lasata Senior Living Campus
- Justice Center
- Highway Department
- Administration Center

Level II audits involve energy surveying and engineering analysis to understand how energy is used in a facility and to identify energy saving opportunities at that facility. The team discussed the order in which audits should be performed and decided that the Lasata Senior Living Campus is the highest priority location for an audit, given the upcoming renovation work that will occur there. The first audit likely will be scheduled for January 2015. It takes approximately four weeks for We Energies to generate a report of the audit, so the Energy Action Team likely will be able to review the findings in February or March of 2015.

In addition to the Level II audits, Level I audits may be scheduled for the Mee-Kwon and Hawthorne Hills golf courses. Level I audits are considered site assessment or preliminary audits. They are not as detailed as Level II audits, but also have the potential to identify energy saving opportunities. Because the county's golf facilities have not undergone any sort of energy analysis, Level I audits may provide useful information about potential energy-related projects at the facilities.

Once the energy assessments and audits occur, the Energy Action Team will have additional information to help identify concrete targets and objectives for energy use associated with county government operations and facilities and to more fully develop a plan of action. Plan development will begin in early 2015 and will accelerate following the results of the energy audits.