

Executive Summary



"Midwinter" by Kevin T. Houle via CC 2.0

The City of Maplewood has embraced environmental stewardship as a core community value, and has been implementing programs and policies that advance local sustainability for many years. Some of the City's numerous actions include signing the Mayor's Climate Protection Agreement in 2008, joining the GreenStep Cities program in 2010, adopting Minnesota's first Green Building Code program in 2013, and investing in solar energy production at City facilities. These efforts and others have brought **added awareness to the impact of the community's energy use** on environmental priorities.

The launch of Xcel Energy Partners in Energy offered the City **an opportunity to better align and leverage the resources and knowledge of Xcel Energy with Maplewood's goals and core community assets**. Partners in Energy is a two-year community support program that facilitates community energy planning and implementation support for targeted, community-specific energy goals. Maplewood is the second community in Minnesota to participate, and is leading the way for other cities statewide.

The City's track record of sustainability leadership made it a strong candidate for Partners in Energy. Some of the reasons include:

- Maplewood has developed a reliable outreach network through other environmental programs
- Maplewood's previous experience with environmental outreach allows the City to build on lessons learned.
- The City's coordination of support from sources such as Minnesota GreenCorps allows more leverage of Xcel Energy resources

The Maplewood City Council approved the Partners in Energy Memorandum of Understanding (MOU) and the formation of an Energy Action Team on November 24, 2014. The MOU approves the initial planning phase of the program, which will be carried out from January to April 2015. Phase Two, implementation of the Energy Action Plan will begin in May 2015.

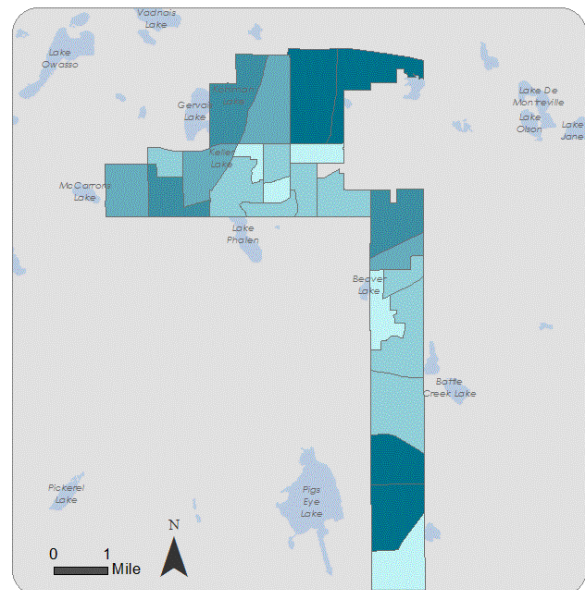


Figure 1. Maplewood High Residential Energy Use

The Partners in Energy Planning Process

Maplewood Energy Action Team participants developed this energy plan during a series of four workshops and one meeting held January through March 2015. These workshops took the group through a series of activities, starting with a review of community-wide energy use information and existing sustainability efforts in the community. Team members developed their vision for how this energy plan would best serve the community's future, and developed and refined strategies for how to get started. With the help of baseline energy data, the group developed goals for action for the next 20 months.

The 14-member Energy Action Team consisted of a range of voices from across the community, from committed and experienced residents, large and small businesses, elected and appointed leadership, and experienced City staff. A strong theme of discussion was that **these efforts should build on the experience and success of the Maplewood's leadership by example.** The group also emphasized that inclusivity across the community, with a strong interest in educational initiatives, would be important. In addition, the **voices of experienced local businesses and community educators ensured that the group considered the pragmatic needs of the community.**

Vision and Goals

The energy vision developed by the Energy Action Team is the catalyst from the City to meet longer range energy goals. Many themes emerged during discussion:

- a desire to be educational, community-led, and action-inspiring;
- a desire for adaptable and easily implementable actions,
- visionary direction towards future generations, carbon neutrality, and grid independence.



Figure 2. Maplewood Energy Vision

The final energy vision states that Maplewood's energy action plan will:

Educate and empower the community to participate in energy actions that will move Maplewood towards carbon neutrality.

The following energy and cost saving goals were developed out of the Energy Action Team's plan. The goals span the 20-month implementation horizon of May 2015 – December 2016.¹

- **Save 400,000 kWh for local businesses and institutions.**

¹ These goals are calculated based on energy use data from 2013, participation goals, and average savings information.

- **Save each participating business an average of \$1,750 per year.**
- **Enroll 4 new buildings in the Green Building Code Incentive Program for recommissioning studies, saving a total of 208,000 kWh and 12,000 therms.**
- **Motivate residents to participate in an additional 500 energy efficiency or renewable energy actions, leading to annual savings of 220,000 kWh and 33,250 therms. Increase renewable energy subscriptions by an additional 267,000 kWh.**
- **Save each participating resident an average of \$130 per year.**

Reaching these goals would reduce Maplewood's annual carbon footprint by 1.8 million pounds, approximately equivalent to the carbon emitted from 170 passenger vehicles per year.

Focus Areas

This 20-month program implementation horizon will focus on two broad areas: assisting local businesses with direct energy programs and coaching, and City-wide education and outreach campaigns to motivate local residents to reduce their energy impact.

Local business outreach will initially focus on the high-profile (and high-use) sectors of auto dealerships and restaurants, and build off of Maplewood's existing communication channels to local businesses through the City's solid waste programs and stormwater partnerships with the watershed districts. This outreach will also help solicit and review applications for the Green Building Code Incentive Program.

City-wide education and outreach will leverage existing community networks to bring awareness and motivate action. **At the heart of this effort will be a community-wide energy competition** that will challenge residents to join teams or enroll to compete to have the biggest impact, supported by energy use and program participation data from Xcel Energy. This focus area will also leverage homeowner energy clinics to promote energy-saving best practices for homes.

Energize Maplewood! Focus Areas & Strategies

Direct Outreach and Energy Coaching for High-Profile Businesses & Institutions

- *Energy Efficiency and Renewable Energy in Auto Dealerships and Restaurants*
- *Outreach to Maplewood Congregations*
- *Green Building Code Incentive Program Outreach*

Energy Education and Public Events to Motivate Residential Energy Awareness and Reduce Consumption

- *Energize Maplewood! Energy Challenge*
- *Home Improvement Store Energy Clinics*

Future Efforts

The Energy Action Team discussed how this plan should be **a catalyst for future action**. The goals over 20-months of new programs may seem small, but they are ambitious new initiatives that reflect a deeper level of community engagement than has been possible in the past. The lessons learned with support from Xcel Energy on implementation will help Maplewood further understand its capacity and opportunities for progress, with the aim of building a network of committed participants for ongoing efforts.

During the 20-months of implementation **there will be built in opportunities for reflection, with a catalog of key lessons and achievements at the end of the process**. As an additional incentive, upon successful adoption of the Energy Action Plan and completion of Maplewood's goals, Xcel Energy will **sponsor educational signage** as recognition of Maplewood's energy achievements on sites across the City.