

# One Business

## Energy Conservation Program



### The City of Duluth

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**Erik Birkeland, Property and Facilities Manager**  
City of Duluth

## A Team Approach to Energy Savings

When Erik Birkeland became property and facilities manager for the City of Duluth in fall 2013, he set the bar high. One of his 2014 goals was to save 1 million kWh of electricity by improving the energy performance of City-owned buildings, parking ramps and other structures. He and his colleagues set out to meet this challenge through a coordinated team approach that keeps energy conservation and building science at the forefront of facility-related decisions.

The City of Duluth is one of many commercial customers, both large and small, that have formed a multidisciplinary Energy Team with Minnesota Power’s Power of One® Business program since 2010. Birkeland was familiar with the approach from his prior position as capital planning manager at St. Louis County, a regional leader in energy conservation and one of the first Energy Team success stories. He immediately saw ways to use that experience for the City’s benefit, building upon good things that already were being done.

“Energy-efficiency upgrades were happening but not in a concerted way and not connected with overall facilities work,” Birkeland said. “I developed a project management office with a tracking system and methodology for how we approach, set up and manage projects.”

The project management office houses a broad range of experts. This includes an energy coordinator focused on number crunching, paybacks and utility costs; a maintenance supervisor with deep knowledge of all buildings and systems; a construction project coordinator; an architect; and Birkeland, himself, as manager.

“This group is now our internal Energy Team,” Birkeland said, adding that the City also brings in asset management consultants to help assess buildings, systems and necessary improvements. “The full Energy Team (our internal team along with Minnesota Power) meets every six weeks to plan potential projects. Minnesota Power provides feedback, points out potential impacts, and helps us shape actual systems and products we might want to consider.”

Getting parties together on the front end leads to more successful projects. This is something Birkeland learned from his mentor, Tony Mancuso, director of property management for St. Louis County. The whole building approach ensures every project is integrated and systems work together for maximum energy efficiency and optimal performance.

Minnesota Power’s Power of One® Business staff adds value to Energy Teams with expertise on both proven



and the latest energy-saving technologies, project design assistance, research resources, energy- and cost-saving calculations, associated paybacks and incentive support.

“We call up Minnesota Power, and someone is always available to give us a quick turnaround on ideas,” Birkeland said. “They help with everything from big renovations to simple lighting improvements—then they wrap up the paperwork for incentives. It is great customer service and is seamless.”

Recently, Minnesota Power’s Power of One® Business staff developed an energy consortium made up of a peer group of large, multi-facility customers with an Energy Team, including the City of Duluth, St. Louis County, the Minnesota Air National Guard, UMD, Essentia Health and Minnesota Power’s own Facility Management Group. It meets quarterly to discuss experiences with energy-efficient technologies, share best practices, and provide ideas to members of the group.

“This field is not standardized,” Birkeland said. “There is benefit in creating awareness and figuring out ways we can work together as public entities and community players. We are building on best practices and not reinventing the wheel.”

While Minnesota Power initially launched the Energy Team concept to support large commercial customers with multiple, complex facilities, the Power of One® Business group is finding that businesses of all sizes can benefit from this approach.

“The original assumption was that we could afford to do this with large customers because the costs and energy-saving benefits balanced, but we have found improved energy savings with smaller organizations using this approach, as well,” said Tim Gallagher, supervisor of program implementation, Minnesota Power. “Rather than depending on one champion in a facility to drive energy efficiency projects on their own, forming an Energy Team brings parties together, improves understanding and buy-in, and leads to action plans that achieve results. The group supports the champion and helps tell the larger story.”

For the City of Duluth’s project management office, working as an Energy Team helps move capital improvements forward. In 2014, projects included parking ramp lighting and controls, IT controls, HVAC controls, elevator upgrades,

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Minnesota Power

and Lakewalk and street lighting improvements. These measures are saving an estimated 898,000 kWh and lowering operating and maintenance costs. They qualified for over \$38,000 in rebates from Minnesota Power in 2014.

“It helps us demonstrate that projects will save energy, lower utility costs, and decrease maintenance,” Birkeland said. “Energy conservation and saving money are big sells at the political level. If the City can invest in efficiencies that reduce its carbon footprint and cut operating costs, that is a good use of taxpayer money.”

Birkeland hopes the Energy Team can help persuade decision makers to explore solar energy in the next few years—especially as the City competes for the \$5 million Georgetown University Energy Prize ([www.duluthenergy.org](http://www.duluthenergy.org)). Renewable energy is at the top of Minnesota Power’s Pyramid of Conservation because its impact is greater once energy efficiency measures are taken. It would be the “icing” on the City of Duluth’s well-planned and systematically implemented energy strategy.

“Solar is harder to sell because the payback is not as aggressive as lighting and other technologies, but it makes sense to push in that direction, too,” Birkeland said. “The stakes are high, but one role of government is to lead, educate and test out new technologies.”

Solar energy is a high priority for Minnesota Power, as well, and the City’s Energy Team partnership will ensure that renewable energy projects are a collaborative effort. Helping customers make informed choices is a vital part of that effort. It is part of Minnesota Power’s **EnergyForward** commitment to evolve the energy landscape.



## For more information:

Take the first steps toward managing energy use and costs at your business. Get started by filling out our free online pre-application at

[www.mnpower.com/BusinessPreApp](http://www.mnpower.com/BusinessPreApp)

Learn more about Power of One® Business, Minnesota Power’s commercial, agricultural and industrial energy conservation program by calling **218-355-2909** or visiting [www.mnpower.com/OneBusiness](http://www.mnpower.com/OneBusiness)