



CASE STUDY: LOCAL GOVERNMENT SOLAR ENERGY

The Sun Always Shines on Kingfield: The Solarize Kingfield Program

Written by Ryan Sparrow • July 2012

The Kingfield Neighborhood Association (KFNA) has recently worked hard to make local businesses shine. Currently, there are only a few solar photovoltaic (PV) flat roof type installations on Minneapolis small businesses and the Kingfield Neighborhood Association is trying to change that. With help from the City of Minneapolis 2010-2011 Climate Change Innovation Grant, the Kingfield Neighborhood Association's Solarize Kingfield program helped local businesses overcome the obstacles to installing solar PV systems.

For over four years, the City of Minneapolis has worked with residents, nonprofits, community organizations, schools and businesses to reduce greenhouse gas emissions at the local level with the Climate Change Innovation Grants. The 2010-2011 grant funding came from Minneapolis' Energy Efficiency and Conservation Block Grant money from the U.S. Department of Energy.

These sub-grants allowed participants to implement their own sustainability initiatives, aimed at reducing fossil fuel emission and improving energy efficiency in the transportation and building sectors. As one of the eight Minneapolis Climate Change Innovation Grant recipients, KFNA chose to work on facilitating solar installation for local business.

The Project

At first, KFNA met with a group of experienced local solar installers and other local solar experts to gain a better understanding of the installation process and all the challenges and existing resources to installing solar PV systems. These initial meetings were a fundamental step to develop a guide for building owners to easily move through the decision-making and assessment process.



The Solar PV array atop of Quality Coaches

Next, KFNA identified up to twenty-six businesses with potential for solar installation via aerial assessments. KFNA proceeded to directly outreach to these business owners, providing education about solar PV systems. KFNA then organized an interactive educational workshop, which included

Project Snapshot

Project: Assisting local businesses in solar installations

Funding:

\$10,000 City of Minneapolis Climate Change Innovation Grant, part of Minneapolis' \$3,909.800 funding

Energy Produced:

Quality Coaches: 25 kW system
Twin Town Guitars: 28 kW system

Cost (after rebates):

Quality Coaches: \$250,000
Twin Town Guitars: \$275,000

Benefits:

Reducing energy costs to small business owners and providing a strong example of the accessibility of solar energy in the Twin Cities. The combined CO2 emissions prevented from the two solar PV arrays is 2,756,181 lbs.

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University of Minnesota Extension and Regional Sustainable Development Partnerships

Eureka Recycling

Southwest Regional Development Commission

The Minnesota Project

Minnesota Department of Commerce, Division of Energy Resources

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installers and local experts, for businesses who expressed greater interest in pursuing installation.

After the workshop, KFNA arranged and paid for solar assessments for six buildings, and paid for Xcel Energy audits on three of the six buildings. The Xcel Energy audits were a critical step in assisting the businesses to qualify for Xcel Energy's Solar Rewards program (<http://bit.ly/LJpYTz>) and the MN Bonus solar rebate (<http://bit.ly/LJpVHb>) programs. Both of these programs significantly lower the cost of installation and encourage businesses to buy local, Minnesota made solar PV systems

Quality Coaches and Twin Town Guitars, two local Kingfield businesses active in the education and outreach process, decided to move forward with solar PV panel installation. Quality Coaches installed a 25 kW solar photovoltaic (PV) array, and also installed new foam roofing that increases heat retention and thus the energy efficiency of their building. Interestingly, Quality Coaches' solar PV array is one of the first business systems in the state with a battery back-up system. Until Quality Coaches' solar PV array, only residential systems in Minnesota used a battery back-up system. Twin Town Guitars is still in the process of installing their 28 kW solar PV system, which they expect to complete by the end of the calendar year. Solarize Kingfield helped finance the cost of necessary structural assessments for these two buildings.

Results

The installation of both solar PV arrays resulted in significant energy savings. Quality Coaches owner and founder Mark Brandow was happy to show off his solar panels. Brandow claims, "My solar array has cut my monthly energy bill in half. It is peak sun season right now, and I can't wait to see the savings." The 25 kW solar PV installation at Quality Coaches prevented 1,261,878 pounds of CO2 emissions and the pending solar 28 kW PV installation at Twin Town guitars will prevent up to 1,413,303 pounds of CO2 emissions!

Sarah Linnes-Robinson, executive director of the Kingfield Neighborhood Association and head coordinator for the Solarize Kingfield program, attributed the success of the program to the business owners themselves. "We [KFNA] learned that the person who is investing in solar has a really unique viewpoint, and will work to overcome obstacles themselves because they feel solar is the right thing to do," Linnes-Robinson stated. She continued to say, "Being able to work with this type of business owner and celebrate their mindset towards their business and its role in the community was really exciting, as well as helping them overcome some of the hurdles in the way of their installation."

The Solarize Kingfield program culminated in Kingfield Neighborhood Association's Let the Sun Shine Tour on June 2, 2012. The event showcased the solar PV systems at both locations. To learn more read our blog post about the event (<http://bit.ly/SLmxMs>). The Kingfield Neighborhood Association is continuing its work with the Solarize Kingfield program, trying to expand its work to residential properties and non-profits.

For more information, contact Sarah Linnes Robinson at sarah@kingfield.org or call 612-823-5980

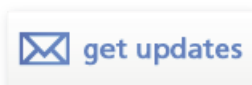


Twin Town Guitars; the other program participant



Solar Tour Participants going to the roof to see the PV array at Quality Coaches

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