# **Creating Chippewa Valley's Clean Energy Future**



The City of Eau Claire, County of Eau Claire and City of Altoona have teamed up to increase their use of renewable energy to 25% by the year 2025. Recent funding awarded from a State Energy Grant, has given them the necessary means to create a strategic plan to meet this goal. As these local governments work towards making a cleaner local energy economy, they encourage you to do the same by using this helpful resource.

# What Does 25% by 2025 Mean?

According to a Union of Concerned Scientists' 2009 Clean Power, Green Jobs analysis, if all utility providers produced 25% of their electricity from renewable energy sources by 2025, it would mean:

- An eight-fold increase in domestic renewable energy capacity
- \$263.4 billion in new capital investment in renewable energy
- \$13.5 billion for farmers, ranchers and rural landowners who produce biomass energy or lease their land for wind turbines
- \$11.5 billion in new property tax revenue for local communities
- 297,000 newly created domestic jobs
- \$64.3 billion savings in lower electricity and natural gas bills
- 277 million metric tons of green house gases reduced annually

# What Are Your Local Utility Providers Doing?

Eau Claire Energy Cooperative has long supported renewable energy in Eau Claire County plus **Cooperative** portions of Chippewa, Dunn, Pepin, Buffalo, Trempealeau and Jackson Counties. Renewable

# **Eau Claire Energy**

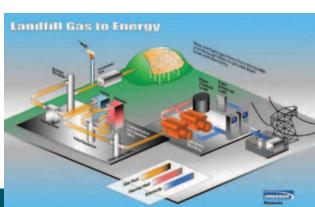
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energy such as wind power, hydro-electric, methane digesters and landfill ags all contribute as sources of electricity for Equ Claire Energy Cooperative's 10,000 plus members through its energy provider, Dairyland Power Cooperative.

#### Seven Mile Creek Landfill Gas-to-Energy Facility

The 4 megawatt Veolia ES Seven Mile Creek Landfill gas-to-energy (LGE) generating facility can power 3,325 homes. Dairyland Power Cooperative owns and operates the generating plant, which is located in the Town of Seymour. The LGE plant came online in 2004 and was expanded in 2008. The natural by-product of residential waste in landfills, methane gas, is the fuel used to generate the renewable energy. In 2004, Dairyland received the U.S.



Environmental Protection Agency's Landfill Methane Outreach Program's Energy Partner of the Year award for their work on this plant.

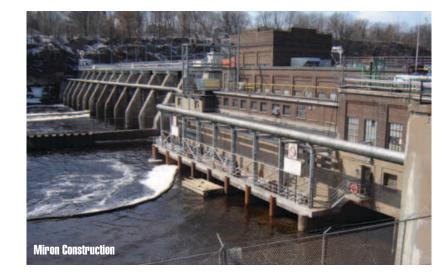


Xcel Energy is an investor-owned utility offering services in eight states. Xcel, through its environmental leadership strategy, is focused on reducing greenhouse gases. To achieve this, Xcel has created a Long-Range Resource Plan for the Upper Midwest generation system by:

- Increasing the use of renewable energy to 30 percent by 2025, with 25 percent being generated by wind. For four consecutive years, the American Wind Energy Association has named Xcel Energy the nation's No. 1 wind power provider. Today, wind energy is 8 percent of Xcel's energy mix and by 2020 it is projected to be about 20 percent.
- Reducing Upper Midwest carbon dioxide emissions by about 22 percent below 2005 levels by 2020.
- Meeting customer energy needs, maintaining system reliability and increasing energy conservation efforts.

#### **Dells Hydro Plant**

Xcel Energy operates 19 hydroelectric plants in Wisconsin, with a total generating capacity of about 260 megawatts (MW). Six of those plants are on the Chippewa River, and collectively account for almost onethird of Xcel's total hydro generation. Recent improvements at Dells Hydro Plant in Eau Claire have increased the generating capacity from 8.5 to 12.5 MW, enough to power another 6,000 homes.



# What Are Your Local Governments Doing? **Energy Independent Community Partnership**

The City of Eau Claire, Eau Claire County and City of Altoona's 25% by 2025 partnership will not only make a difference in their own operations, but it will impact their combined 100,000 plus citizens. The \$55,000 grant provided by the Wisconsin Office of Energy Independence enables the three communities to assemble a five year energy baseline, determine potential renewable and energy efficiency projects, and create a strategic plan to work towards the 25% by 2025 goal.

# City of Eau Claire

The City of Eau Claire has been committed to reducing its overall energy use as it brings renewable energy projects online. For example, over \$1 million dollars are being spent on various energy efficiency and heat recovery projects (LED Traffic Lights, HVAC improvements, building weatherizations, lighting retrofits, etc). Within ten years, it is expected these projects will be paid off while having reduced energy consumption and CO<sup>2</sup> emissions.



Over the last 30 years, the City of Eau Claire has captured methane gas from an anaerobic digester to help co-power the Waste Water Treatment Plant, Approximately \$200,000 is saved annually. As part of a major 2010 upgrade, the City is considering increasing methane gas availability to create more electricity.



The City of Eau Claire has used geothermal heating and cooling since 2000 at its Water Treatment Plant. At Hobbs Ice Arena, the City installed waste heat recovery systems in 2009-10, piping waste heat from chillers to run other equipment.

Over 15% of the City's fleet can run on E85 and that number grows every year. The Park's Department has three new electrically powered mule-carts and one new hybrid vehicle. Learn more about City of Eau Claire initiatives at www.eauclairewi.gov/green



#### **County of Eau Claire**

The County of Eau Claire has also focused on lowering its use of energy with efficiency projects. Several of these are: HVAC improvements, lighting retrofits, building weatherizations, and installation of a PC Energy Management System for all County computers. The system is projected to save 122,725 kwh/year.



The Eau Claire County Sheriff Department has 11 E85 capable vehicles in the fleet. The County has two hybrid vehicles.

Eau Claire County recently adopted an ordinance to allow all types of wind energy systems, including those intended for commercial production of electricity and those intended for personal use.

# **City of Altoona**

The City of Altoona is implementing energy savings measures from recent building audits. For example, in cooperation with the Altoona Youth Hockey Association, a comprehensive re-lighting project was completed for



the City's Hobbs Arena. The 200 watt fluorescent fixtures replaced 400 watt fixtures. The project nearly doubled the lumens in the arena, while cutting energy costs in half.

In another partnership, both the City and Altoona School District are exploring fleet options for conserving fuel, converting to bio-based fuels and down-sizing to more energy efficient vehicles.

In 2007 the City purchased a windmill unit to operate a leachate pumping station at a closed City-owned landfill. The small windmill has allowed the City to realize both capital and operational savings. The City also installed a solar powered lighted stop sign at one of the City's major intersections.

#### What Can You Do?

Remember, when thinking about renewable energy, it's usually best to start with lowering your overall energy usage through conservation and efficiency. Obtaining a building energy assessment is useful to know where to begin. Another cost effective strategy before installing a system is to purchase green power off the grid. When deciding on any project, make sure to ask if it is eligible for multiple incentives/rebates. Piggy-backing incentives can make your project more affordable.

#### **Start with an Energy Assessment**

#### **Xcel Energy - Community Conservation Program**

Xcel has partnered with Focus on Energy to provide Home Performance with ENERGY STAR® Assessments for only \$45 now through the end of the year to:

 Eau Claire County residential customers outside the City of Eau Claire and Dunn County residential customers

For more information or to schedule an assessment, please contact Xcel Energy by calling 1-800-762-7077. (If you are a small business owner in these counties, call 715-737-2570)

#### Eau Claire Energy Cooperative - Home Performance Evaluation

A \$100 rebate off the price of an evaluation along with implementation incentives can help you care for the investment you have in your home by making energy efficiency improvements that save you money and increase the comfort, safety, durability and value of your home. Contact 715-832-1603 for more information.

#### Focus on Energy - Renewable Energy Site Assessments

Focus on Energy Site Assessments provide objective, third-party recommendations for customers considering solar electric, solar water heating and wind electric systems. Costs for site assessments vary depending on the type and complexity of the renewable energy system. Call 1-800-762-7077.

# **Purchase Renewable Energy**

# **Eau Claire Energy Cooperative Customers**

Evergreen<sup>SM</sup> is a voluntary program ideal for those who want to do more to preserve the environment and support renewable energy generation.



ECEC's diverse portfolio of renewable energy means that Evergreen includes not just wind power, but also biomass sources such as landfill gas and animal waste energy. Call 715-832-1603 or 1-888-832-1604 to get started!

#### **Xcel Energy Customers**

Windsource® allows you to choose how much of your power you want supplied by wind farms in nearby Minnesota, by selecting a number of 100 kWh blocks or by choosing the 100% option. Call 1-800-895-4999 to get started!



#### **Generate Renewable Energy**

#### Federal - Residential Renewable Energy Tax Credits

Type: Biomass Heating Stove

Tax Credit: 30% of cost up to \$1,500

**Details:** Must be an existing home & your principal residence. New construction and rentals do not qualify.

 Types: Geothermal heat pumps, Small Wind Turbines (Residential), Solar Energy Systems (Solar Hot Water and Solar Photovoltaic Panel Systems)

Tax Credit: 30% of cost with no upper limit

**Details:** Existing homes & new construction qualify. Both principal residences and second homes qualify. Rentals do not qualify.

Above tax credits Expire December 31, 2016. For more details see www.energystar.gov/index.cfm?c=tax credits.tx index

#### State - Solar & Wind Equipment Property Tax Exemption

Any value added by solar-energy or wind-energy systems on commercial, industrial, residential is exempt from general property taxes. Contact WI Depart. of Revenue, at 608-266-7750, or go to www.revenue.wi.gov/forms/govexmpt/pr-303.pdf

#### Eau Claire Energy Cooperative - Rebates on Geothermal

Over 500 of ECEC's members have installed geothermal systems. Rebates are available for all sectors. Other energy efficient equipment and appliances are also eligible. Good thru 2010 or until funds are depleted. Contact 715-832-1603 or visit www.ecec.com/programs/incentives

#### Xcel Energy - Renewable Energy Buy-Back Rates

This production incentive applies to commercial, industrial, residential and other sectors for a wide host of renewable options. Xcel will buy back the energy you put on the grid. Terms are over a 10-year fixed rate contract period. Contact Xcel Energy Services Regulatory Policy at 608-280-7308.

#### Focus on Energy - Renewable Energy Cash-Back Rewards

Renewable technologies eligible: solar water heat, solar thermal process heat, photovoltaics, wind, biomass, solar pool



heating. Geothermal rebates are available through Residential Heating & Cooling Rewards. Applicable sectors: commercial, industrial, residential, others. Amount varies by technology and type of project; higher incentives available for Efficiency First participants. Renewable electricity systems must be grid-tied. Please call: 1-800-762-7077 for more details or go to www.focusonenergy.com/Incentives/Renewable/

#### Resources

1. Attend the 21st
Annual Energy Fair
June 18-20, 2010.



It's the Nation's premier energy education event held in Custer, WI. For more information, contact the Midwest Renewable Energy Association at 715-592-6595 or visit www.the-mrea.org

- 2. Focus on Energy's Renewable Energy Information Center 1-800-762-7077 http://www.focusonenergy.com/information-center/renewables/
- 3. U.S. Department of Energy's Energy Efficiency & Renewable Energy Office http://www.energysavers.gov/
- 4. Database of State Incentives for Renewables & Efficiency

www.dsireusa.org

#### 5. Eau Claire County Extension Office

• Eau Claire EcoTeams are designed to help people make voluntary changes in the way they interact with the environment. EcoTeam resources will assist you in translating your desire to do the right thing into a program of environmental action that will make a difference. Call 715-839-4712 or go to www.sustainableeauclaire.org for more information.



• Find tips on how to be energy efficient in your home on topics ranging from household laundry tips to understanding airflow. http://www.extension.org/home%20energy

#### 6. Property-Assessed Clean Energy (PACE)

PACE is a funding mechanism to help reduce upfront costs for efficiency/renewable projects. Property owners voluntarily opt into the program to attach up to 100% of the cost of energy improvements to their property tax bill. The low-interest loan is tied to the property itself; not the borrower. The repayment assessment stays with whoever owns the property, and the interest portion of the assessment is tax deductible. If you are interested in utilizing a local PACE program, please call 715-839-4914.

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