



# **Solar Energy Resources**

# **Getting Started with Solar**

The City of Altoona is seeking ways to encourage solar energy development in our community. This webpage represents a collection of solar information and resources for the community. Our community's solar goals can be found in its <a href="Solar Statement">Solar Statement</a> (link to be found under the SolSmart section). For more information about the basics of solar energy, your solar options, and questions to ask solar professionals, read the <a href="Residential Consumer Guide to Solar Power">Residential Consumer Guide to Solar Power</a> and visit the Department of Energy's <a href="Homeowner's Guide to Going Solar">Homeowner's Guide to Going Solar</a>.

#### For communities working towards designation:

Altoona is working to become a <u>SolSmart</u> designated community by implementing best practices to make it easier for residents and businesses to install and access solar energy. SolSmart is a national program funded by the U.S. Department of Energy that has helped hundreds of local governments become "open for solar business." Learn more about the program <u>here</u>.



#### **Policies and Processes**

#### **Our Solar Commitment**

The City of Altoona and its Planning and Development office are committed to exceptional customer services as it relates to solar processes. To promote the continued advancement of solar in our community we are committed to the following:

- Providing clear guidelines about the solar permitting and inspection process in our solar checklist.
- Using an online application process.
- Permitting solar uses by right in all zoning districts.

The City of Altoona's solar zoning regulations can be found in <u>Section 19.61.040</u> of the Altoona Municipal Code. The City has also adopted WI UDC SPS 316 and NEC 2017 as part of the solar review process.

# The Benefits of Going Solar

Solar energy uses a renewable energy source – the sun – and provides many benefits for individuals and the community. It improves environmental quality by reducing carbon emissions and air pollution, supports local solar companies in <u>Wisconsin</u>, creates local jobs, saves money on energy costs, and improves electric grid resilience during peak demand and other stresses to the system.





#### **Solar Maps and Potential**

Investigate your property's solar potential by <u>clicking here</u>. You can also estimate the performance of potential PV projects using the National Renewable Energy Laboratory's <u>PVWatts Calculator</u>.

# **Solar Energy in Altoona**

- In 2021, 89 residential premises and one commercial and industrial premise subscribed to an Xcel Energy renewable energy program, and 10 residents and 5 commercial / industrial premises subscribed to Eau Claire Energy Cooperative's subscription program MemberSolar.
- Of the commercial / industrial premises, four were the City of Altoona.
- In 2021, the City purchased approximately 66,000 kWh to Member Solar in 2021.
- Post community metrics related to the number of solar PV and solar PV plus storage permits, as well as inspections processed by the community annually, average annual permitting, and average annual inspection timelines.
- The City is currently undergoing a microgrid feasibility study for its East Neighborhood District.

# **Local Solar Projects**

- Altoona Partners in Energy Program
- Altoona Microgrid Feasibility Study
- Altoona 25 x 25 program

#### **Finding a Contractor and Going Solar**

Find a solar contractor(s) to assess your home or business for solar energy and provide a quote.

- Certified practitioners can be found through <u>NABCEP</u>.
- Visit <u>EnergySage</u> to learn about solar energy and submit for solar quotes from a network of prescreened, local solar installers.
- <u>Solar Customer Resource Portal</u> various resources from SEIA, the Solar Energy Industries Association.
- <u>Solar Owner's Manual</u> information for current solar homeowners to ensure they are getting the most out of their system from Solar United Neighbors.

# **Financing, Incentives, and Tax Exemptions**

Typically, solar installations are paid for through loans, upfront payments, or a power purchase agreement (PPA).

• <u>A Homeowner's Guide to Solar Financing</u> is a resource from the Clean Energy States Alliance that provides an overview of the different financing options.

**Federal Incentives:** There are many new incentives and funding opportunities available for solar and other clean energy technologies.

A great place for residents to start identifying the federal incentives for which they are eligible is
 <u>this calculator</u> from Rewiring America. The rebates and incentives available through the federal
 Inflation Reduction Act can vary depending on your location and income.





- Additional details about benefits in the Inflation Reduction Act can be found on the <u>White</u>
   House's <u>website</u> or the <u>Department of Energy website</u>.
- The Federal Investment Tax Credit for residential solar continues to be one of the most significant ways to reduce the cost of your solar PV system. Learn more about the federal tax credit, eligibility, and other common questions & answers in the <a href="Homeowner's Guide to the Federal Tax Credit">Homeowner's Guide to the Federal Tax Credit for Solar Photovoltaics</a> from the U.S. Department of Energy.
- Businesses should refer to the Federal Solar Tax Credits for Businesses.
- Some solar projects will be eligible for bonus credits on top of the 30% Investment Tax Credit.
   The Inflation Reduction Act provides up to 20% in bonus credits for qualified solar or wind facilities developed in low-income communities; up to 10% bonus for projects located in "energy communities" that have a historic fossil-fuel economy, high unemployment or are developing solar on a brownfield; and 10% domestic content bonus for projects using the required amounts of U.S.-produced steel, iron and manufactured products.
- The World Resources Institute has created an <u>IRA Bonus Mapper tool</u> to help identify communities that are eligible for the low income and energy community bonus credits.
- Tax-exempt organizations, including non-profit organizations, schools, and government entities, can now take advantage of the federal tax credit through "elective pay" (sometimes referred to as "direct pay.") An <u>overview of elective pay</u> and <u>Frequently Asked Questions</u> are available from the IRS.

#### State and local incentives:

- Information about state incentives can be found in <a href="this database">this database</a> maintained by the North Carolina Clean Energy Technology Center.
- Many new state programs are expected to be announced in 2024 & 2025 as a result of federal funding. Stay tuned for announcements from your state!

# **Consumer Protections, Solar Rights, and Procedures**

- <u>Consumer Solar Checklist</u> a checklist for residential consumers considering solar energy from IREC, the Interstate Renewable Energy Council.
- <u>Solar United Neighbors' Solar Owner's Manual</u> serves as a support for solar homeowners whether you've just gone solar or you've had solar for years.
- <u>Clean Energy Consumer Bill of Rights</u> ensure a positive consumer experience by addressing important issues from IREC, the Interstate Renewable Energy Council.
- <u>Database of State Incentives for Renewables and Efficiency (DSIRE)</u> provide state-specific information on incentives and policies that support renewable energy and energy efficiency in the United States.
- Altoona has posted energy savings opportunities for residents on its social media and weekly
  newsletter. These might include rebates, <u>federal / state tax credits</u>, and solar / renewable
  energy options from local utility companies (<u>Xcel Energy</u> and <u>Eau Claire Energy Cooperative</u>).
- A Beautiful Day in the Neighborhood: Encouraging Solar Development through Community
   Association Policies and Processes includes details on how communities can encourage solar development through community association policies and processes.
- For an overview of local zoning regulations and permitting procedures please refer to our <u>solar</u> permitting checklist.





#### **Get Involved, Stay Informed**

The City of Altoona has an <u>energy action plan</u> as part of its partnership with Xcel Energy in its energy action program. Our energy action plan creates intention, focuses our efforts, and identifies actions to engage our community to benefit municipal properties, new development, small and medium-sized businesses, residents, and rental property owners.

In addition, Altoona has made renewable energy initiatives a core part of its overall planning efforts. The <u>Altoona 2022 Comprehensive Plan</u> uses Climate Action has a pillar throughout all planning goals and initiatives are filtered. Solar action is an essential part of these efforts.

For details about opportunities please see the City of Altoona social media and our weekly newsletter. The City has posted various opportunities to secure solar savings and installation opportunities. Information includes:

- Federal Solar Tax Credits
- Xcel Energy and Eau Claire Energy Cooperative Renewable Energy Subscriptions

# **Job Training and Educational Opportunities**

If you are interested in pursuing a career in solar energy, here are some links to regional and national educational courses, programs, and/or trainings offered from colleges, universities, technical institutions, and non-profits.

- Midwest Renewable Energy Association
- Job Center of Wisconsin
- Solar Career Map
- Solar Ready Vets Pilot Program
- HOPE Workshop

### **More Useful Solar Information**

- Wisconsin Office of Energy Innovation
- Wisconsin Office of Sustainability and Clean Energy
- Xcel Renewable Energy
- Eau Claire Energy Cooperative
- Midwest Renewable Energy Association
- Focus on Energy