

MINNESOTA SMALL WIND TURBINE REBATE Instructions for Residential Rebate Applications



INTRODUCTION

The Minnesota Small Wind Turbine Rebate for Residences provides financial support for the installation of small wind turbine systems completed after July 1, 2009 with rated capacities not more than thirty-five kilowatts (35 kW) at 24.6 miles per hour (mph). The rebate amount is 35% of eligible system and installation costs up to \$10,000. To be eligible:

- a small wind turbine system must be installed at an existing primary residence in Minnesota;
- a system must be installed by a bonded and/or licensed contractor as applicable under state and local requirements;
- a system must have a minimum average wind speed of 12.0 mph at hub height;
- an installation must comply with all applicable federal, state and local requirements; and
- an installation must be completed within six months (180 days) of approval of the rebate application.

This program is funded by the American Recovery and Reinvestment Act of 2009 (ARRA), Pub. L. 111-5 and authorized by Laws of Minnesota 2009 Chapter 138. Federal and state guidelines require that projects adhere to a number of reporting and project implementation standards as outlined below.

The basic steps to receive a residential Small Wind Turbine Rebate are:

1. Employ energy efficiency and conservation measures first: make your home as efficient as possible.
2. Find out whether your location can benefit from a small wind turbine by checking the online *Minnesota Wind Speed Verification Tool* at www.energy.mn.gov > *Renewables* > *Wind* > *Small Wind* > *Resources*. The Office of Energy Security (OES) also recommends a wind site assessment by a certified wind site assessor. A small wind site assessor can provide an objective evaluation of your specific location. The site assessor need not be the installer who completes the installation.
 - The Midwest Renewable Energy Association (MREA) hosts a Certified Renewable Energy Site Assessor Locator and Directory at <http://www.mreacsa.org/>. The MREA certifies that these individuals or businesses have met training and testing standards developed by the MREA.
3. Learn about small wind turbine options.
 - The Office of Energy Security website hosts a small wind turbine section with information and web links that may be useful: at www.energy.mn.gov > *Renewables* > *Wind* > *Small Wind*, or
 - contact Minnesota Energy Information staff at:
1-800-657-3710 (MN only)
651-296-5175
651-297-7891 FAX
651-296-2860 TTY
energy.info@state.mn.us
4. Choose qualified equipment
 - See a list of qualified models below in the Terms and Conditions, Equipment Requirements section
5. Select a small wind turbine installer.
 - See the publication *Hiring a Renewable Energy Contractor* at www.energy.mn.gov > *Renewables* > *Wind* > *Small Wind*. It includes a list of small wind installers serving Minnesota.
6. Your installer should work with your electric utility on an interconnection application, if applicable, and local building officials on any applicable building codes. Your installer must secure all required permits.

7. With help from your installer, submit an application AFTER assembling all supporting documentation. **Make sure all areas of the application are complete and that all supporting documentation from the application checklist has been included. Incomplete applications will NOT receive a rebate reservation.** Applicants are strongly encouraged to check for the latest version of the application before submitting.

Make a copy of the rebate application materials for your files and mail or deliver the originals to:

**Small Wind Turbine Rebate Program
Minnesota Office of Energy Security
85 7th Place East, Suite 500
Saint Paul, MN 55101-2198**

8. Upon receiving a completed application, OES will send you a **Rebate Confirmation Form** to let you know that your application has been approved. Your installer may be notified as well. If approved, you will also receive a **Rebate Claim Form** that you will need to complete and return after your system is installed. **IMPORTANT: System installation must be completed by the expiration date indicated on the Rebate Confirmation Form. Extensions may be made on a case-by-case basis and must be requested at least 5 business days prior to the expiration date.**
9. After installation is complete, submit the original **Rebate Claim Form** and supporting materials to the Small Wind Turbine Rebate Program. If the rebate claim package is complete, the rebate will be issued within 30 days.
10. Additional funding may be available through federal tax incentives or your local utility. For a current list of federal, state, and utility energy incentives, visit the Database of State Incentives for Renewable Energy website at www.dsireusa.org.

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TERMS AND CONDITIONS

- Rebates may be awarded for eligible small wind turbine installations completed on or after July 1st, 2009. Rebates will be awarded on a first-come, first-served basis until all available funds have been reserved. Mailed applications will be time stamped as having been submitted at 4:00 p.m. on the postmark date.
- For systems beginning construction after April 30, 2010:
 - Participants must submit an application to reserve rebate funding.
 - Participants must supply all necessary permits with rebate reservation application. Rebate reservation applications submitted without all necessary permits must provide permit application documentation and an explanation of timeline to obtain the permit. Rebate reservation applications without all necessary permits may be approved on a conditional basis provided that evidence of the missing permit(s) is provided to the rebate administrator within 30 days of the application date.
 - If a project is approved, the applicant has 180 days to install the system, assemble the necessary supporting documentation, and submit final documentation to the OES claiming their rebate. Extensions may be granted, but must be applied for no later than 5 days before application approval is scheduled to expire.
 - A **Rebate Confirmation Form** and **Rebate Claim Form** will be mailed to the applicant upon application approval. Claim the rebate by completing the installation and submitting the **Rebate Claim Form** with supporting documentation within six months of receiving the **Rebate Confirmation Form**. **No installation work should be done before receiving the Rebate Confirmation Form. Failure to adhere to this requirement may void the rebate.**
- Residential Small wind turbine system installations completed from July 1, 2009 through April 30, 2010 must meet program requirements and the applicant must submit all of the information in the above Rebate Application Checklist to claim the rebate.
- The rebate amount is 35% of eligible system and installation costs up to \$10,000. The rebate amount cannot exceed the total cost of an installation minus federal, utility or other incentives.
- An installation must be at homeowner's existing, primary residence. Rebates cannot be used for an installation in new construction. *Note: A home that has been issued a permanent occupancy certificate before the small wind turbine installation is started would be considered existing construction.*
- **SITE REQUIREMENTS**
 1. Site must be within Minnesota borders.
 2. Site must have minimum average annual wind speed of 12.0 mph at hub height. The following evidence of minimum wind resource will be accepted with rebate applications:
 - a printout from the *Minnesota Wind Speed Verification Tool* online at www.energy.mn.gov > *Renewables > Wind > Small Wind > Resources*, or
 - a report from a Wind Site Assessor certified by the Midwest Renewable Energy Association (MREA) indicating average annual wind estimate.
- **EQUIPMENT REQUIREMENTS**
 1. All major system components must be new or remanufactured.
 2. A 5-year warranty is required on major system components and installation, with the exception of batteries, for which a 2-year warranty is required.
 3. The tower design must be approved by a professional engineer for use with the proposed turbine.

4. The minimum tower height allowed for rebate is 80 ft, measured at hub height, unless it can be demonstrated that a minimum wind resource of 12 mph is available at a lower hub height.
5. Rooftop or building integrated wind turbines are not eligible for rebate.
6. For grid-connected systems, inverters must be UL listed or listed by another nationally recognized testing laboratory.
7. Eligible Equipment:

MANUFACTURER	MODEL
Aerostar	Aerostar 6 Meter
Bergey Windpower Co.	BWC XL.1
Bergey Windpower Co.	BWC EXCEL-S
Endurance Wind Power	S-250
Endurance Wind Power	G3120
Enertech	44a
Gaia-Wind Ltd	11 kW
Proven Energy, Ltd.	Proven 7
Proven Energy, Ltd.	Proven 11
Proven Energy, Ltd.	Proven 35-2
Southwest Windpower Co.	Skystream 3.7
Southwest Windpower Co.	Whisper 100
Southwest Windpower Co.	Whisper 200
Southwest Windpower Co.	Whisper 500
Ventera Energy Inc.	VT10
Wind Turbine Industries Corp.	23-10 Jacobs
Wind Turbine Industries Corp.	31-20 Jacobs
XZERES Wind Corporation	XZERES 110
XZERES Wind Corporation	XZERES 442

● **INSTALLATION REQUIREMENTS**

1. All systems must be installed in accordance with manufacturer's recommendations and all applicable local, state, and federal codes and permits.
2. Participants must demonstrate that the system meets all eligibility requirements.
 - a. Applicants and installers are responsible for ensuring an accurate representation of the site.
 - b. OES reserves the right to reject any application if the installation site does not meet technical, environmental, or historic preservation requirements.
 - c. OES or its subcontractor reserves the right to conduct site inspections to verify compliance with program requirements.

● **INSTALLER/CONTRACTOR REQUIREMENTS**

1. Contractors and subcontractors must be licensed and/or bonded as applicable under state or local requirements.
 - All electrical work must be performed by a licensed electrician working for a licensed electrical contractor.
2. The installer must provide information to the participant about operation and performance considerations and maintenance of the system.
3. By signing the Minnesota Small Wind Turbine Rebate Application, a small wind turbine installer/contractor agrees to:
 - Provide the state with accurate information regarding the full scope of the project, including but not limited to: itemized pricing of equipment.
 - Abide by, and require subcontractors to abide by, all state and federal guidelines and requirements, including reporting, associated with the Minnesota Small Wind Turbine Rebate Program.

● **APPLICATION CHANGES**

- Major changes (such as change of installer, tower height, location, or system size) require prior written approval.
- Requests for extension of the rebate expiration date must be made in writing at least 5 business days prior to expiration.

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ARRA Requirements

National Environmental Policy Act (NEPA)

OES is required to notify DOE if it determines that an activity categorically excluded from NEPA review appears to present an extraordinary circumstance as defined under 10 CFR § 1021.410(b). Applicants will need to certify to OES that their proposed small wind turbine installation activities will NOT:

1. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;
2. Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities;
3. Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; or
4. Adversely affect environmentally sensitive resources. Environmentally sensitive resources include, but are not limited to:
 - (i) Property (e.g., sites, buildings, structures, objects) of historic, archeological, or architectural significance designated by federal, state, or local governments or property eligible for listing on the National Register of Historic Places;
 - (ii) Federally-listed threatened or endangered species or their habitat (including critical habitat), federally- proposed or candidate species or their habitat, or state-listed endangered or threatened species or their habitat;
 - (iii) Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains;
 - (iv) Areas having a special designation such as federally- and state-designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and federal wildlife refuges, and marine sanctuaries;
 - (v) Prime agricultural lands; and
 - (vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region).

Compliance with National Historic Preservation Act

Prior to the expenditure of federal funds, all building-related projects must undergo review under Section 106 of the National Historic Preservation Act of 1966 (36CFR 800). Section 106 applies to projects that include historic properties listed in or eligible for listing in the National Register of Historic Places that have potential to be affected by federally funded activities. All buildings and properties meeting the following criteria will be subject to Section 106 review:

- Any project involving ground disturbing activity (excavation, utility installation, etc.); or
- Buildings at least 45 years old; and
- Individually listed in the National Register of Historic Places (NRHP); or
- Within a designated National Register Historic District;
- Eligible for listing in the NRHP (either individually or as part of a district); or
- Subject to an approved preservation easement.

It is the responsibility of the applicant to provide the information needed to comply with Section 106 requirements.

Minnesota Data Privacy Act/Tennessee Warning

The Minnesota Data Privacy Act requires that certain information you provide on this form remain as private data. The information about you that is collected on the Small Wind Turbine Rebate Program application will be classified as either public or private data. Public data will be accessible to the public. Private data about you will be accessible only to you and State personnel and their authorized subcontractors who administer the program and reporting requirements. The data you give us about yourself is needed to:

- Identify you;
- Contact you in case of program or energy use evaluation;
- Comply with certain federal and state reporting requirements;
- Evaluate program effectiveness; and

- Administer the Small Wind Turbine Rebate Program.

If you choose to supply all of the requested data, your completed rebate application will be processed on a first-come, first-served basis. If you refuse to supply data requested on the rebate application form, your application will not be processed.

Please note that rebates and rebate applications may be considered public documents and may be subject to disclosure to the public upon request.

The total funding for state Small Wind Turbine Rebate Programs is up to \$500,000. See www.energy.mn.gov for state Small Wind Turbine Rebate Program information.

OES reserves the right to adjust these terms and conditions as necessary.

The Office of Energy Security website hosts a small wind turbine section with information and web links that may be useful: www.energy.mn.gov. Questions regarding this application should be directed to the Energy Information Center at 651-296-5175 or energy.info@state.mn.us.

**MINNESOTA SMALL WIND TURBINE REBATE
Residential Application**



APPLICANT INFORMATION

IMPORTANT! Read rebate application instructions *carefully* before filling out this application. All areas of the application must be completed and all supporting documentation from the application checklist must be provided to receive a rebate reservation.

Contact Name/Owner _____ Site Address if different than mailing address (no P.O. Boxes): _____
 Mailing Address _____
 City, State, Zip _____ Is this a primary residence for at least 1 occupant: Yes No
 County _____ Township Name _____ Township No. _____
 Range No. _____ Section No. _____ Quarter _____
 Daytime Phone _____
 E-mail _____ Annual electricity consumption (kWh) _____
 Electric Utility _____ Utility account # _____

INSTALLER/CONTRACTOR INFORMATION

Business Name _____ Electrician License # _____
 Lead Installer Name _____ General Contractor License # (if applicable) _____
 Mailing Address _____
 City, State, Zip _____ E-mail _____
 Phone _____ Fax _____

WIND RESOURCE

Average Annual Wind Speed at Hub Height (mph) _____
 Verified by: Minnesota Wind Speed Verification Tool, and/or MREA Certified Site Assessor
 Site coordinates: Site Assessor Name (if applicable) _____
 Latitude _____ Site assessment date _____
 Longitude _____ Phone _____
 E-mail _____

INSTALLATION

Installation Cost _____ Estimated annual production (kWh) _____
 Installation completed? Yes No Completion Date / Estimated Completion Date _____
 Turbine Manufacturer _____ Model # _____
 Interconnection Grid-tied Off-grid Battery system No Yes, # and rating: _____
 Capacity (kW) _____ Tower height (ft) _____ Foundation depth (ft) _____
 Tower type stand-alone lattice guyed lattice monopole tilt-up other _____
 Tower design approved by Professional Engineer for use with this turbine No Yes
 Professional Engineer Name _____ approval date _____ State of P.E. Licensure _____
 Foundation type spread footing caisson other _____
 Inverter
 Manufacturer _____ Model # _____
 Rated Capacity (kW) _____

Office Use:
 Date of Receipt: _____ App. # _____ Date of Letter _____ Rebate Amount \$ _____

SITE SPECIFIC INFORMATION:

Would any migratory animal corridors be impacted or disrupted by the proposed project? No Yes _____

Identify any state- or federal-listed endangered or threatened plant or animal species affected by the proposed project. _____

Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape? No Yes _____

Would the proposed project be located within 2 miles of a parkland or wildlife area? No Yes _____

Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)? No Yes _____

Year that subject property (the home) was built _____

Is property located within or adjacent to a historical preservation district? No Yes

Is the property individually listed in the National Register of Historic Places? No Yes

Describe any other historical, archeological, or cultural sites at or in the vicinity of the proposed project. _____

Would the system be installed in a previously undisturbed area? No Yes

Characterize present land use where the proposed project would be located:

Urban Suburban Rural Agricultural Forest Other _____

Soil Type: _____ Vegetation _____

Rock type: _____ Anticipated depth to bedrock: _____

Would the proposed project be located in or impact a floodplain or wetland? No Yes _____

Would the proposed project be likely to cause runoff/sedimentation/erosion? No Yes _____

What steps will be taken to control erosion during construction. _____

What, if any, remediation (e.g., re-vegetation) would be undertaken following installation? _____

DECLARATION & SIGNATURE

The undersigned warrants, certifies and represents that: (1) the information provided in this form is true and correct to the best of my knowledge; and (2) the installation will meet all Minnesota Small Wind turbine Rebate Program requirements.

Signature _____
Applicant (original signature needed)

Signature _____
Installer (original signature needed)

Print Name _____

Print Name _____

Date _____

Date _____

ADDITIONAL INFORMATION

This section is optional

Are you interested in participating in a study of small wind turbine performance? Yes No

Please describe other energy saving measures being taken: _____

REBATE APPLICATION CHECKLIST

REBATE RESERVATION APPLICATION DOCUMENTATION

- Completed Rebate Application Form with **original signatures**
- End-User Agreement with **original signatures**
- Copy of a Project Estimate or Purchase Order
 - **Itemized list of major system components and costs** (Equipment, Labor, Design, Permits and Fees, and Warranty Costs)
 - Equipment model numbers
 - System Size (kW)
 - Estimate total Cost
- Printout from [Minnesota Wind Speed Verification Tool](#) showing average site wind speed of at least 12.0 mph
- Report from certified Wind Site Assessor including estimate of average annual wind speed (if applicable)
- Copy of recent electric bill for the installation address
- Copy of Approved Building and/or Zoning Permit
- Copy of Application for Electrical Inspection
- System Schematic (must be site specific.) include inverter, main electrical box, and battery back-up (if applicable)
- Site Plan*: Show location of installation on property with respect to landmarks or built structures. Include distances in feet, guy wire anchor locations (if applicable), and length width and depth of excavation for tower foundation. Show heights of trees and buildings within 100ft. Show relationship to major roadways. Include north arrow.
- Aerial or Satellite photo*: Indicate tower location
- Topographic map*: Indicate tower location. Map must show section numbers and be scaled to show adjacent sections.
- Site Photos*:
 - Photo of site, labeled, where tower foundation will be installed with a marker to show proposed location
 - A panoramic photo or series of 8 photos at the project site from 0° to 360°, labeled, showing treeline, built structures, and any other possible obstructions
 - Exterior photos of the house—at least two views taken from opposing corners, showing all sides

FINAL DOCUMENTATION

- Completed Rebate Confirmation and Claim Form with original signatures
- Copy of Final Sales Invoice(s)
 - **Itemized list of major system components and costs** (Equipment, Labor, Design, Permits and Fees, and Warranty Costs)
 - Equipment model numbers
 - System Size (kW)
 - Actual price paid
 - Show Paid in Full
- Copy of Final Building and/or Zoning Permit Inspection and Approval Documents
- Photo of Electrical Inspection Approval Sticker
- Copy of Warranty Agreement (5 year minimum, parts and labor)

***Questions?** For detailed instructions on taking photographs, finding aerial photos, and drawing site plans, visit our website: www.energy.mn.gov and navigate to the "Funding" page, and click in the sidebar under "Additional ARRA Requirements."



END-USER AGREEMENT
Minnesota Small Wind Turbine Rebate Program

- I. I agree to provide the OES, or its contractors, access to the proposed installation site for the purpose of conducting a site audit. The results of the audit may be used to verify the data submitted in the Small Wind Turbine Rebate Application and to determine eligibility.

- II. If necessary, I agree to provide OES, or its contractors, with access to the small wind turbine system as necessary for the completion of ongoing research related to the Minnesota Small Wind Turbine Rebate Program. Access will be scheduled with the applicant at least seven working days in advance.

- III. I agree to provide the Minnesota Department of Commerce, Office of Energy Security (OES), with energy use and production data for a period of four years through equipment metering or through electric utility bills. I authorize my electric utility to release energy production and consumption data to the OES.

Applicant Name _____

Signature _____

Date _____

Electric Utility _____

Electric Utility Account # _____