



## **Focus on Energy Renewable Energy Program**

### **Proposal Guidelines**

**2007 – 2008**

## **Solar Electric Implementation Grant**

For systems of  
over 20 kW and no more than 50 kW

Proposals are due  
on the last  
Wednesday of  
the month

This document is  
valid through  
December 31,  
2008.

Funds distributed  
on a first-  
approved basis.

Questions related to proposal submission should be directed to:  
Focus on Energy Renewable Energy Program at:  
888.476.9534 or 608.441.3840 or  
[renewableapplications@focusonenergy.com](mailto:renewableapplications@focusonenergy.com)

Focus on Energy Renewable Energy Program  
431 Charmany Drive ~ Madison, WI 53719

# Implementation Grant Guidelines

## What is Focus on Energy?

Focus on Energy works with eligible Wisconsin residents and businesses to install cost effective energy efficiency and renewable energy projects. Focus information, resources and financial incentives help to implement projects that otherwise would not get completed, or to complete projects sooner than scheduled. Its efforts help Wisconsin residents and businesses manage rising energy costs, promote in-state economic development, protect our environment and control the state's growing demand for electricity and natural gas.

## What is an Implementation Grant?

Implementation Grants provide financial support for the installation of commercially available renewable energy systems that produce electricity and/or thermal energy. For smaller residential or non-residential electric or thermal renewable energy systems, please use the Cash-Back Reward application forms, available at [www.focusonenergy.com](http://www.focusonenergy.com) or call 800-762-7077.

Focus on Energy's policy limits awards to no more than \$260,000 to any individual or business during each fiscal year. This includes projects contracted between July 1, 2007 and December 31, 2008. There is no restriction on the number of contracts an individual or business can receive within the \$260,000 fiscal year limit.

## Important!

Before you order, purchase or begin to install any system components, and before you sign an installation contract, your application must be approved by Focus on Energy and you must sign an Implementation Grant Agreement form. Payment of the Implementation Grant is made to you after the renewable energy system is installed and you submit a complete Notice of Installation.

## Who is Eligible?

Businesses, organizations, institutions, and state, county, local or tribal governments are eligible if they purchase natural gas or electricity from a Wisconsin utility participating in the Focus on Energy Program. If the renewable energy project is reducing/replacing electricity consumption, you must be a customer of one of the following electrical utilities:

Alliant Energy  
Argyle Electric & Water Utility  
Belmont Municipal Light & Water  
Benton Electric & Water Utility  
Bloomer Electric & Water Utility  
Cadott Light & Water Dept.  
Cashton Light & Water  
Centuria Municipal Electric Utility  
Consolidated Water & Power Co.  
Cornell Municipal Light Dept.  
Cumberland Municipal Utility  
Dahlberg Light & Power Co.  
Eau Claire Energy Cooperative  
Elroy Electric & Water Utility  
Gresham Water & Electric Plant

Kiel Utilities  
La Farge Municipal Utilities  
Madison Gas & Electric  
Manitowoc Public Utilities  
Mazomanie Electric Utility  
Medford Electric Utility  
North Central Power Co. Inc.  
Northwestern Wisconsin Electric Co.  
Pardeeville Public Utilities  
Pioneer Power & Light Co.  
Price Electric Coop.  
Princeton Light & Water Dept.  
Rice Lake Utilities  
Richland Electric Coop.  
Scenic Rivers Energy Coop.

Shawano Municipal Utilities  
Shullsburg Electric Utility  
Spooner Municipal Electric Utility  
Stratford Water & Electric Dept.  
Superior Water, Light & Power Co.  
Viola Municipal Electric Utility  
We Energies  
Westfield Electric Co.  
Wisconsin Dells Water & Light Utility  
Wisconsin Public Service Corp.  
Wonewoc Water & Light Dept.  
Xcel Energy

**OR**, if your electric provider is not listed above, AND if your renewable energy project is reducing/replacing natural gas consumption, you must be a customer of one of the following natural gas utilities to be eligible:

Alliant Energy  
Midwest Natural Gas, Inc.  
We Energies

City Gas Company  
St. Croix Valley Natural Gas  
Wisconsin Public Service

Madison Gas & Electric  
Superior Water, Light & Power  
Xcel Energy

## **Other Eligibility Requirements**

1. Collaborations or partnerships with non-eligible entities are allowed, but the grant must support a project in an eligible territory. The applicant must be the majority owner of the renewable energy system.
2. The project's simple payback period must be greater than two years. Payback period is defined as: (total estimated cost of the project) divided by (the estimated annual savings minus annual recurring costs such as additional estimated operation and maintenance costs).
3. The proposed project must be replacing/saving natural gas or electricity. Projects replacing/saving other fuels such as propane, coal or oil do not qualify. Projects that improve the efficiency of an existing renewable energy system are eligible if the project results in additional renewable energy use.
4. Focus on Energy's policy limits awards to no more than \$260,000, for any combination of grant types, to any individual or business during each fiscal year. This includes projects contracted between July 1, 2007 and December 31, 2008. There is no restriction on the number of contracts an individual or business can receive within the \$260,000 fiscal year limit.

## **How do I Apply for an Implementation Grant?**

Fill out the Implementation Grant application, which is included as Appendix A at the end of this document. Be sure to complete all relevant sections, attach requested supporting information and have the application signed and dated. Applications must be received by noon on the last Wednesday of the month to be considered for the next month's grant review meeting. Should the last Wednesday fall on a Federal holiday, the proposal is due on the last Tuesday of the month. Incomplete applications will not be reviewed by committee until they are made complete.

**Please mail or e-mail one original or electronically signed application with any supporting documentation to:**

Renewable Energy Program  
Focus on Energy  
431 Charmany Drive  
Madison, WI 53719

E-mail: [renewableapplications@focusonenergy.com](mailto:renewableapplications@focusonenergy.com)

Keep a copy of your application materials for your records.

## What Happens After I Apply for an Implementation Grant?

Implementation Grant applications are reviewed monthly on a first-approved basis and are subject to availability of funds. Focus on Energy Staff review and score the grant applications based on the following:

25% of score	Impact of project to advance renewable energy markets
25% of score	Reasonableness of costs, proposed installation time schedule, amount of cost share
25% of score	Adequacy of equipment, installers and energy calculations
25% of score	Readiness to proceed with project (feasibility studies, financing, installation date, permits, power purchase agreements, etc.)

All proposals must include sufficient information to allow the above factors to be evaluated. Only applicants that furnish complete information will be considered for evaluation. Partial proposals will not be considered. The Focus on Energy Renewable Energy Program reserves the right to make final selections.

## What Happens if my Grant Proposal is Approved?

If notified that you have been awarded a grant, you will be sent an Implementation Grant Agreement form and a W9 tax form which you must sign and mail back to Focus on Energy within 30 days. The Implementation Grant Agreement form contains terms and conditions you must follow, which are shown in the next section.

All wind turbine projects must obtain a building permit and/or a conditional use permit from the local municipality before the wind electric system can be installed. A copy of this permit must be submitted to Focus on Energy before a Notice of Installation is sent to you.

Before you order, purchase or begin to install any system components, or before you sign an installation contract, your application must be approved by Focus on Energy and you must sign an Implementation Grant Agreement form.

If your system's expected electricity production changes by more than 20 percent after your Implementation Grant is approved, please update the information on the system in writing with the contact information listed on the cover sheet of this application. If the system's updated application is not approved by Focus on Energy, additional funds will not be awarded to the system.

To receive the grant funds, you must submit a Notice of Installation after the renewable energy system has been installed. The Notice of Installation form will be mailed to you with the Implementation Grant Agreement form and a W9 tax form.

The Implementation Grant funds will be paid within 60 days after the complete Notice of Installation has been received and approved by Focus on Energy.

## General Terms and Conditions

The following terms and conditions apply to all Implementation Grants:

1. The installation must comply with all applicable federal, state and local codes and regulations governing the installation and operation of renewable energy systems. Electric renewable energy systems must comply with the Wisconsin Electrical Safety Code (Volumes 1 and 2). Solar water heating systems must comply with the Wisconsin Plumbing Code.
2. Required Warranties:
  - a. Two-year Installation Warranty. The system must include at least a two-year installation warranty that covers any defect in the workmanship of the installation.
  - b. One-year Equipment Warranty. All major system components, including any remanufactured or used equipment, must have at least a one-year warranty.
3. Grants are funded on a competitive basis. Grant awards may be less than the amount requested by the applicant.
4. Focus on Energy's policy limits awards to no more than \$260,000, for any combination of grant types, to any individual or business during each fiscal year. This includes projects contracted between July 1, 2007 and December 31, 2008. There is no restriction on the number of contracts an individual or business can receive within the \$260,000 fiscal year limit.
5. The grant recipient agrees to operate the renewable energy equipment, at the location proposed and as described in the grant application, for at least three years.
6. For renewable electric systems, a system performance meter must be included in electric generation systems to measure the total electricity produced in kilowatt-hours (or watt-hours) and have a manufacturer's uncertainty of no more than +/- five percent. The meter must retain the electricity production data in the event of a power outage. The electricity production data must be displayed in a manner that is easily understandable to the system owner.
7. If the renewable energy system is modified after signing this document, the recipient must notify Focus on Energy of the changes in writing. Changes must be approved by Focus on Energy. Failure to receive approval from Focus on Energy for any changes to the renewable energy system may result in a reduced grant payment.
8. This Grant is a not-to-exceed amount. Only expenses identified in the Grant Application will be eligible for reimbursement. Renewable energy components ordered, purchased or installed before this Grant Agreement Form has been signed will not be eligible for reimbursement unless approved by Focus on Energy.
9. The funding match requirement must be met as indicated in the grant proposal.

10. The renewable energy system must be installed and the Notice of Installation submitted within one year, although written requests for extensions will be considered. Projects that take more than six months to complete must submit a progress report after six months noting progress toward installation (such as copies of receipts for equipment purchases). If after six months there has been no substantial progress toward project completion, Focus on Energy reserves the right to terminate the grant.
11. To receive this grant award, the recipient must submit a Notice of Installation after the renewable energy system has been installed. The Notice of Installation must include:
  - a. The final electric and/or thermal capacity and estimated annual energy produced by the system that was installed
  - b. Dated and detailed invoices for all project costs; only costs directly linked to the renewable energy system are eligible
  - c. Copies of warranties for major system components and system installation
  - d. For grid-connected electric systems, a copy of the signed interconnection agreement with your electric utility
  - e. Other items stipulated in the Notice of Installation form
12. Your name and grant award information may be used in various communications to the media. A representative of Focus on Energy will contact you before we use your name in any media communications.
13. Focus on Energy reserves the right to inspect the grant recipient's work to ensure that it is consistent with program guidelines, and to monitor or evaluate the performance of the system for a period of two years after the system has been installed.
14. Focus on Energy reserves the right to terminate this grant award in whole or in part due to the recipient's failure to fulfill the terms certified in this agreement, or due to non-appropriation of necessary funds.
15. The grant recipient will not construe, claim or imply that acceptance of this grant constitutes Wisconsin Focus on Energy Program's approval, warranty, guarantee or endorsement.

# Solar Electric System Implementation Grant Guidelines

## Funding Determination

The maximum Implementation Grant is based on an estimate of the amount of electricity (in kilowatt-hours) that the solar electric system will produce in an average year:

$$\text{Maximum Implementation Grant} = (\text{annual electricity produced in kilowatt-hours}) \times (\text{reward level})$$

Reward levels for systems sited at:

- Residential or Commercial buildings: \$1.00/kWh
- Non-profit 501 (c) 3 or government building: \$1.50/kWh

Limitations:

- Funds are available for systems of more than 20 kilowatts (kW) and not more than 50 kW. Where kilowatts is defined at the total DC rating of the installed modules.
- Funds will cover no more than 25% of the installed cost.
- No more than \$50,000 will be provide to any site per fiscal year.

Focus on Energy will use PVWatts (version 1) to estimate the one-year kilowatt hour output of your system. PV Watts is available on-line at [http://rredc.nrel.gov/solar/codes\\_algs/PVWATTS/](http://rredc.nrel.gov/solar/codes_algs/PVWATTS/). In PV Watts, the system output is reduced by 20% to account from going to D.C. to A.C conversion (i.e. the system's DC to AC Derate Factor equals 0.80). Estimates of module shading, snow cover and module griming for flat lying systems are used to adjust the one-year electricity production estimate.

Requirements:

- The system must be utility grid connected.
- Solar electric modules and inverters must be new and certified by the California Energy Commission.
- The solar electric system installer must either be NABCEP certified or actively pursuing NABCEP certification. The Midwest Renewable Energy Association (MREA) tracks the installers that are actively pursuing NABCEP certification. NABCEP certified installers and MREA recognized installers pursuing NABCEP Certification are identified on the Focus on Energy Full Service Solar Electric System installers list. The full service installers list is available at the Focus on Energy webpage in the Renewable Energy Yellow Pages section.

Example of Funding Level Determination:

- A 22-kilowatt fixed PV system, located on the La Crosse area school (eligible for the \$1.50/kWh reward level), facing south at a 35 degree slope from horizontal, with four percent snow cover and shading, is estimated to produce 27,047 kilowatt-hours per year and cost \$150,000. It would be eligible to receive a grant of \$37,500. It would not receive \$1.50 multiplied by the system's anticipated annual production (which is \$40,570), because this is more than 25% of the systems cost (which is \$37,500).

**APPENDIX A**  
**Grant Application**  
**Solar Electric Systems**

**Section 1: Applicant Information**

Company/organization that will own the system: \_\_\_\_\_

Address (must be a street address: cannot be a P.O. Box):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

County: \_\_\_\_\_

Company's federal ID number (EIN or SSN): \_\_\_\_\_

Business classification (circle)

Individual/Sole Proprietor      Corporation      Partnership      Other: \_\_\_\_\_

Name of primary contact: \_\_\_\_\_

Contact's phone number: \_\_\_\_\_

Contact's fax number: \_\_\_\_\_

Contact's e-mail address: \_\_\_\_\_

Address where system will be installed (must be a street address: cannot be a P.O. Box):  
(if different from mailing address)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

County where system will be installed (if different from mailing address):

Electric utility at the installation address: \_\_\_\_\_

**Section 2: Contractor Information**

Name of installation contractor: \_\_\_\_\_

Mailing address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Name of installation subcontractor (if any): \_\_\_\_\_

Phone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Name of installation subcontractor (if any): \_\_\_\_\_

Phone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

For each installation contractor and subcontractor (if any) provide information on their qualifications and a list of projects that they've completed that are similar to the project described in this grant application.

Attach a copy of the installation warrantee.

### Section 3: Project Description

Has a feasibility study or site assessment been performed for the proposed project? YES or NO  
If yes, please attach a copy of the study or assessment to this application.

Please attach a copy of the solar electric system site plan to the application and a one page description of this project that includes the location, size, scope and intended goals or impacts of the proposed system.

Complete this table as applicable:

Manufacturer and Model	Rated Capacity each (kW)	Number	Total Rated Capacity (kW)	Cost
Modules:				
Inverter:				
Rack:	NA	NA	NA	
<b>Other Costs</b>				
Balance of System:				
Monitoring Systems:				
Permitting fees and Engineering Costs:				
Equipment Rental:				
Installation Labor:				
Shipping:				
Other (describe):				
Tax:				
<b>Total Cost:</b>				

Type of rack (circle one):

1. Fixed: If fixed, provide compass direction in which the modules face (degrees): \_\_\_\_\_  
and slope from horizontal (degrees): \_\_\_\_\_

- Is the inclination of the rack manually adjustable and will it be adjusted on a regular basis?:  
Yes No

2. Single-axis tracking: slope from horizontal (degrees):

3. Dual-axis tracking

Production Losses from Shading, Snow Cover and Grime Build Up

(An estimate of grime build up is only needed for systems that have slope from the horizontal of less than 5 degrees.)

- Estimated annual shading \_\_\_%, snow cover\_\_\_% and grime buildup: \_\_\_%
- Shading analysis tool used: \_\_\_\_\_

Estimated annual revenue from electricity sales or savings (dollars/year): \_\_\_\_\_

Estimated annual operation and maintenance cost (dollars/year): \_\_\_\_\_

Simple payback period (years): \_\_\_\_\_

*(total estimated cost of the renewable energy system) divided by (the estimated annual revenue minus annual recurring costs such as additional estimated operation and maintenance costs)*

Show simple payback period calculation:

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Attach an installation/equipment estimate or bid from a manufacturer or installation contractor.

Attach any product literature or information, including copies of the product warranties.

**Section 4: Other Information**

Have you applied for or been awarded other grants for this project? If yes, please identify the grant, source of grant, the grant award amount and anticipated award schedule:

Why do you need Focus on Energy funding for this project? Please explain:

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Estimated date of hiring an installation contractor: \_\_\_\_\_

Planned completion date: \_\_\_\_\_

## Section 5: Applicant Certification

I hereby certify that I have performed or reviewed this analysis and the attached documentation, and that the information is reasonable and accurate.

\_\_\_\_\_  
Applicant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

Periodically, Focus on Energy evaluates program energy savings by monitoring energy use prior to and after home improvements. Your signature provides Focus on Energy approval to obtain energy consumption data directly from your utility company. If you prefer not to grant Focus on Energy access to your energy consumption records, please check the "Opt Out" box.  Opt Out

Keep a copy of this document for your files.

To be completed by Focus on Energy staff:

Application received by:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

Estimate of energy production: \_\_\_\_\_

Estimated grant amount: \_\_\_\_\_

Estimated production and grant amount approved by:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date