

## Solar Electric, Solar Heating, and Small Wind Energy .....Contractors Serving Minnesota

To view Minnesota installer companies on a map, visit <http://installormap.mncerts.org>. Also see <http://www.thecleanenergybuilder.org> for supplemental information.

Solar, wind, and other renewables may not be the lowest cost way to reduce your energy bills. Optimize returns on your renewable energy system by investing in energy efficiency first. An energy audit is a good first step and is available through many utilities at a discounted price. After energy efficiency measures are taken, renewable energy may make sense for you as a clean energy source. The following questions may help you begin the conversation with a renewable energy professional. You will get the most out of the discussion if you do some initial homework.

### **Questions to ask a Renewable Energy Installer**

- What is included in a solar or wind site assessment? How will I know if my site is appropriate?
- Do you perform an energy use evaluation to help me save energy or do you have suggestions about where to seek this service ?
- Is the installer who will be performing the work NABCEP (North American Board of Certified Energy Practitioners ([www.nabcep.org](http://www.nabcep.org))) certified?
- Approximately how much energy will the system produce and what portion of energy use might I expect the system to offset annually? This is also known as the solar fraction or wind fraction. Will the system measure and track energy production? How do I manage loads in order to achieve the predicted solar/wind fraction?
- What is the current monetary value of the energy saved/generated?
- Does your bid reflect the total cost of the system? Are structural engineering considerations included? Under what circumstances will I be charged extra for unanticipated costs? What incentives are available to offset the system cost? Who handles the paperwork for incentives?
- Will you as be responsible for obtaining the appropriate permits? (For example, building, plumbing, electrical, zoning, as required by the local jurisdiction.)
- Do you provide a maintenance or service warranty? How do you handle manufacturer warranties? What maintenance is recommended? How long can I expect the system to last?
- How long have you been in business? How many installations have you done? Do you have references I can contact? Photos of previous installations?
- When could the installation begin? From start to finish, including utility or permit approvals, how long might the installation take? (Permitting and incentive application processing vary by location.)

- For wind and solar electric: Do you work with my electric utility to complete grid interconnection? Are there interconnection costs? (Utility interconnection costs and approval time vary.)
- Will you provide an owner's manual upon commissioning the system?
- If there is a blackout, what options do I have for backup power and how much do they cost?

**It is a good idea to speak to more than one contractor before making a final decision. As with any building improvement, it is important that you are comfortable with your contractor.** Be sure that each bid specifies system type and size, expected energy production, maintenance requirements, and installed cost.

Disclaimer: The resources listed above are not an endorsement by the Minnesota Department of Commerce. Consumers are advised to perform due diligence in selecting a contractor such as seeking references, verifying licensing, etc.