Before you begin...

**Energy efficiency is the cleanest energy of all.** Before adding solar energy production, limit your need for additional energy by making your farm or business as energy efficient as possible. All of our utilities have incentives for efficiency improvements, and the MN Department of Commerce provides a wealth of resources (www.energy.mn.gov). MN Project offers farm energy resources (bit.ly/tmp-farm) and MN Energy Smart serves businesses (mnenergysmart.com).

1: GET EDUCATED

**Understand what sort of system is right for you.** Solar technologies come in differing models. A photovoltaic (PV) system offsets electric energy use. A solar thermal hot water system reduces demand for fuels needed to heat water. A solar thermal air heat system lowers demand for fuels needed to heat buildings. Any one of these technologies might be right for you depending on your energy use and the solar resource available at your site. Learn more about technologies on the CERTs solar page (solar.mncerts.org) or contact CERTs staff (listed on reverse).

2: START PLANNING

**Consider your sun exposure, budget, and roof life and structure.**

**Sun Exposure:** It is important to consider the solar resource at your site. A solar site assessor can help you decide which technologies are the best fit for your farm or business. Assessments will provide insight on the solar resource and potential structural issues. **TIP:** Using a third party to get an unbiased opinion for your site assessment can be helpful. Clean Energy Project Builder (thecleanenergybuilder.com) provides a directory of assessors who can provide this information. Minnesota Renewable Energy Society (mnrenewables.org) and Midwest Renewable Energy Association (midwestrenew.org) also offer this service. A basic assessment can even be performed virtually, limiting trips to your farm or business.

**Planning and Zoning:** It’s important to check in with your local city/county about ordinances that might be in place that would impact your solar project. Some require setbacks or structural assessments, for instance. Your solar installer should have a good handle on this process, but it’s worth knowing in advance.

**Budget:** Installers should be able to provide a good cost estimate for a project you’re considering, and incentives can make solar more affordable. The federal Business Energy Investment Tax Credit can cover up to 30% of the project cost, and USDA REAP provides grants for up to 25% of the cost. Some utilities offer incentives, as well. An updated list of incentives can be located at dsireusa.org.
3: SEEK ADVICE

We can provide one-on-one assistance. If your farm or business is looking to implement solar and you want to talk it over, just give us a call or an email and we’d be happy to help:

- Joel Haskard, Co-Director with the Clean Energy Resource Teams, at 612-625-8759 or haska004@umn.edu
- Jake Fischer, Clean Energy Program Manager with The Minnesota Project, at 651-789-3330 or jfischer@mnproject.org

4: GET BIDS

Compare bids from several solar contractors.

You can use our online directory, the Clean Energy Project Builder (thecleanenergybuilder.com), to help you search for solar contractors. The Minnesota Department of Commerce, Division of Energy Resources provides a useful set of questions to ask potential contractors (bit.ly/solarhire). TIP: Most contractors will charge you a fee for coming out to do a site assessment, but then subtract that amount from your contract if you select them. Sometimes you can get site assessments for free or reduced costs in months when installations are slower (December, January, and February in MN).

5: INSTALL SOLAR

Select a contractor, sign a contract, and install your system. TIP: It usually takes from two weeks to two months from the time you sign an agreement to the time a project is completed, depending on the type of solar technology and the incentive process. If installing PV, your contractor will facilitate an interconnection agreement with your electric utility that will allow you to track your production and get paid for excess production with net metering.

6: TELL YOUR STORY

We’re always interested in hearing about Minnesotans going solar! If you’re interested, we’d love to share your solar experience—and hopefully also provide some marketing for your farm or business—by doing a small article as part of our MN Energy Stories blog (blog.mncerts.org). Your story could be inspiration for others.