

# What to know when considering solar panels

From the [S.C. Energy Office](#)

## **What are the benefits of adding solar panels, regardless of whether I'm a private residential customer, business or city government?**

For most of us, a reduced electric bill is the most important consideration. Solar panels may also increase property value, although that research is still in the early stages. But many people also care about using clean energy and supporting local job creation. For a city government, there's the possibility of using solar panels creatively to provide additional benefits, such as shaded parking lots or even window awnings to cut down on sun coming into a building.

## **How do I make sure my structure and location are a good fit for solar panels?**

Ideally your roof should face south or west. Other exposures can support solar, but less energy will be produced. You also have to consider shading — Are there lots of trees? Are there other buildings that will cast a shadow over your roof during the course of the day? Ideally, you would install solar when you installed a new roof, so that the panels don't need to be removed to re-shingle soon after they are installed. Google has a useful tool called Project Sunroof that estimates savings for purchased or leased panels.

## **How do I figure out whether my building will generate enough solar energy to justify the equipment?**

A good installer will give you a spreadsheet showing how much energy you are likely to generate during each season. You can then factor in your utility rate to determine how much you can expect to lower your utility bill, and thus how quickly the project will pay for itself. Make sure to consider how long you expect to be in your home when you make your calculations! As a double check on what the installer's estimates tell you, see [Project Sunroof site](#).

## **What rebates and tax credits exist for municipalities?**

Local governments won't be able to take advantage of tax credits. The S.C. Energy Office has a low interest loan program (currently 1.5 percent interest) that can be used for solar projects by local governments and non-profits, if the projected savings are high enough. Local governments in areas defined as rural by the U.S. Department of Agriculture's Rural Energy for America Program may be able to take advantage of grants or loans to assist with the cost of solar installations.

## **What rebates and tax credits exist for residential structures?**

Some of the best incentives are tax credits. To take full advantage of the federal 30 percent tax credit and the state's 25 percent tax credit, you have to have enough tax liability to begin with. Residents who are, for example, living on a fixed income should evaluate their tax situation very carefully before counting on having up to 55 percent of the cost of the installation made up

through the tax credits. There is a \$3,500 maximum per year cap on the state's tax credit, but residents may carry the credit forward for up to 10 years.

As is the case for government installations, residents should check with their utility to see what, if any, incentives are available. They vary from utility to utility and may change over time. More information on incentives for a variety of energy-related activities is available at [www.dsireusa.org](http://www.dsireusa.org).

### **How common is it to see solar panels on public infrastructure? Are local governments in South Carolina going solar?**

It is becoming more common. The Energy Office recently issued a ConserFund loan to the [Town of Saluda](#) to add solar to several of its buildings and a loan to the [Edgefield School District](#) for a large solar installation at Parker Elementary School. This will allow the school to get approximately 80 percent of its electricity from solar power. Several new schools are being constructed in South Carolina to either include solar panels or to be “solar ready” when financing to add solar becomes available.

### **Is there a contact list for S.C. solar installers?**

Not at this time. There is no requirement for solar installers to be licensed in the state, although they do have to be licensed contractors, and electrical work must be completed by a licensed electrician. The [S.C. Solar Council](#) maintains a listing of installers who have worked in the state for several years and have completed a significant amount of work in the state. See [www.scsolarcouncil.org](http://www.scsolarcouncil.org) and click the “resources” tab. The [S.C. Solar Business Alliance](#) also includes a list of members. See [www.solarbusinessalliance.com](http://www.solarbusinessalliance.com).

### **Where can I get more information?**

The Energy Office website, [www.energy.sc.gov](http://www.energy.sc.gov), contains information at both the “renewables” tab and the “residential” tab. Residents and local governments alike should always contact their utility to be sure they understand potential incentives and pitfalls.