

# Extracting key ideas and details using questioning

Use the active reading strategy of **questioning** to find the author's main idea, supporting reasons, and details!

## Can Solar Energy Work for You?

by Greg Anderson

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January 15, 2016



Greg Anderson recently interviewed Samantha "Sunshine" Cooper, known as "Captain Sunshine" to her friends. She is a local expert and community coach on the benefits and costs of installing solar panels on homes and community buildings.

**Hello, Captain, and thanks for joining us today. Our readers are interested in installing and supporting city solar projects, but they have questions about their feasibility and the costs to taxpayers. We hear so much about this topic, and some of the information is confusing. Let's hope you can help make sense of this solar "storm."**

Greg, the good news is that solar power is cheaper and easier than ever to install and operate, and we have every reason to believe it's going to get better and better. I believe solar power is by far the best way for us to lower energy costs.

**Great! But does solar energy really make sense in cold regions like New England and other northern areas of the U.S.?**

Absolutely, yes! Solar panels actually work more efficiently in cooler climates. The panels retain heat and help melt snow more quickly. In addition, sunlight reflecting off snow on the ground can contribute to generating electricity during winter.

**Some folks worry that if we have a long stretch of stormy weather, they might be without electricity.**

No, Greg, because the vast majority of solar programs are tied to the electric grid. Ideally, you will produce what you need, but if you do not, you will continue to draw electricity from the grid as needed.

**Okay, but doesn't a solar energy system require a lot of maintenance?**

Not really, no. Solar panels generally require very little maintenance because they have no moving parts. A few times a

Ask yourself: What is this article about? Is it really about "Captain Sunshine?"

- About sharing info on solar energy

- Capt. Sunshine here to answer questions

How Captain Sunshine might respond to this?

- Solar programs tied to electric grid! Didn't know this -- great point!

year, the panels should be inspected to be sure that they are free of dirt. For a general cleaning, simply use a standard garden hose to wash the panels. There also are automated cleaners that are similar to sprinklers and can be programmed to provide routine and regular cleaning and maintenance. You do need to start with a roof that is in good condition and can support the panels before installing them.

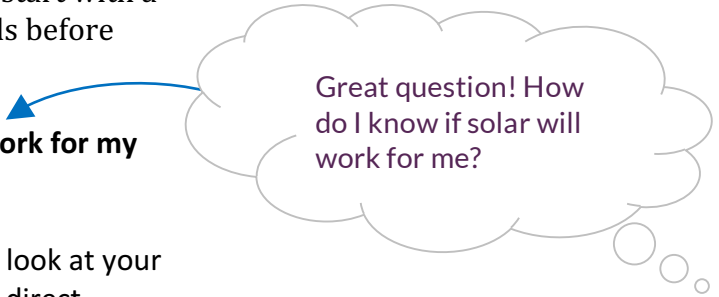
### **It all sounds good so far. So how do I know if solar will work for my home or a community building?**

Get a solar evaluation. Any local installer will be happy to look at your roof and can quickly assess whether you are working with direct sunlight or shade. The direction your roof faces will figure into that assessment. A southern facing roof will allow you to generate more energy. The evaluation also will assess the shade factor. Nearby buildings and trees might limit the amount of sunlight a building receives. Often, the installer can start by looking at Google map images of your address. If your site appears to have good potential the installer will schedule a site visit, examine the roof, determine the amount of sunlight and shade the roof receives, and estimate how many panels are needed to generate enough electricity to lower significantly your electric bill and to help offset the cost of installation.

### **Isn't solar really expensive to install?**

Yes and no. You or your town need to consider the costs and the savings of solar panel installation. Let me outline the process for you.

- First, there are some useful tools called solar calculators, out there on the Internet that can help you estimate both your costs and your savings.
- There are initial installation costs that vary based on the number of solar panels that you will need.
- There are federal and state loans available to help cover the cost of installations.
- Many suppliers offer incentives.
- Also, you may get a substantial tax rebate from your state.
- Finally, you will save on your electric bill, and you might be allowed to sell excess electricity—electricity that you produce, but don't use—to the power company. The availability of the option to sell excess electricity is decided on a state-by-state basis.
- Here's a way to calculate the costs of solar panel installation: <http://www.carlisesolarchallenge.com/solar-savings/>



Great question! How do I know if solar will work for me?

- Evaluation will remove guess work



Is it expensive? I've always heard it was ...

- Lots of things that offset the cost.

### **Captain, will solar panels detract from the appearance of our community buildings?**

Greg, this is a great question, and one often asked by homeowners. Solar panels do have a distinctive look, and only you, as a homeowner or a taxpayer, can decide how you feel about the appearance.

I can tell you that there are some new options on the market; for example, solar shingles that do the job and maintain the appearance of a traditional, shingled roof.

Another factor to consider is the message you send to neighbors and friends when you choose to install solar panels. You are making a statement that you care about conserving energy. You are placing yourself among those who understand the value of underused resources, such as sunshine. Their different appearance sends a message of a different way of thinking.

### **Should I hold off on installation until better technology comes along?**

The sooner you get started, the better off you will be. Development is ongoing, and delaying installation only postpones your chance to enjoy the benefits of solar power. Future developments may be easily integrated with what you install now.

### **Is wind a better option than solar?**

Locations that benefit from wind are harder to find than locations that have ample sunlight. The installation of wind-harnessing technology is more difficult and requires many criteria to be met on site. All options are worth exploring, but you will find more advice, support, and guidance in your search for information on solar panels.

### **Do you have any final words of advice, Captain Sunshine?**

I really recommend that you create a group of interested community members to make a plan. Make sure your group contains some financial and tax experts and representation from your town government. Then, work with local suppliers and state and federal governments to see what is available for your community. I believe that solar is the best solution to lower costs for individual and community electricity needs and to protect the environment for the future. Check out solar!

What will Captain Sunshine say in defense of solar panels?

- Not all solar panels look the same.

- They can show that you care about energy

How does solar compare to wind energy?

- Solar panels easier to set up and more effective

This must be the conclusion.

- Interviewer asking last question

- Capt. Sunshine offers final thoughts