

Review: A solar home isn't for everyone

April 28 2013, by Troy Wolverton

As someone who considers himself an environmentalist, I'd love to get a solar array for my home. But I'm finding that it may not make a lot of sense - at least right now. My wife and I drive fairly fuel-efficient cars. Our house is lit almost entirely with compact fluorescent and LED light bulbs. And our entertainment center is connected to a power strip that turns off all of our various game consoles and digital set-top boxes whenever the TV is off.

So getting a [solar array](#) would be right in character for us. And with solar panel prices plunging and the sizable [federal tax credit](#) still available, now would seem a good time. With many of my neighbors installing systems, I figured I'd start shopping for one also.

But I quickly discovered our house is far from an ideal candidate for a solar system. First, we just don't use a lot of electricity. In fact, in the more than two years since we moved into our house, our electrical bill has topped \$40 in a month only once.

I'd like to claim credit for that, but I can't. Yes, we try to be energy-efficient, but our real secret is that we don't have an [air conditioner](#) or anything else in our house that sucks a lot of [electrical power](#). The other big things that often boost [electric bills](#) - furnace, stove, clothes dryer and water heater - are all powered by gas.

While I'm happy to have a low electric bill, it means that installing a [solar power system](#) doesn't make a lot of financial sense. The general rule of thumb that installers give you is that switching to solar generally

makes sense if you are spending at least \$100 a month on electricity.

Even if you figure that we wouldn't need that large of a system to meet most of our electrical needs, it would still likely take us more than 20 years to break even on the system. And that's if we paid for it outright. If we financed it or got into one of the leasing options, it almost certainly would take longer. Given that we may not be in this house in 20 years, there's a decent chance that we'd never see the financial benefits of going solar.

I was still determined, in part for the psychological benefit of knowing that I was doing my small part to fight global warming. But there was another problem: Many installers won't install a system as small as the one we'd likely need.

And if that weren't enough, our house has another problem - shade.

Our neighbors have a two-story home that sometimes casts a shadow on the southwest side of our house. Worse yet, they have a tree in their front yard that's even taller than the house and shades parts of both the southwest and southeast sides of our house.

Those shadows are great for keeping our house cool, but they fall on the sides of the house that are the sweet spots for solar panels.

In fact, after reviewing satellite shots of our house, a representative of one installer I spoke with - SolarCity - said that the shadows were so significant that they wouldn't even consider putting in a system at our house.

I haven't given up hope yet. Other contractors I spoke with weren't as concerned about the shade issue. It's possible that they or someone else could design a system for our [house](#) that's more cost-effective.

And solar may make more sense for us in the future if prices continue to fall or if we get that electric car I'm pining for. Assuming we bought a fully electric model, it could easily double the amount of electricity we use each month, meaning that a solar system might pay off much, much faster. But right now, as much as I hate to admit it, it's looking like solar isn't for us.

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