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EDUCATION—HELP CREATE
MORE DEMAND FOR SOLAR

*It does not take a majority to prevail but rather
an irate, tireless minority, keen on setting
brushfires of freedom in the minds of men.*

—SAMUEL ADAMS

If you think that education only happens in school and that only teachers are the ones who educate people, you should think again. Education happens anytime a person, whether a child or an adult, learns something new.

The Founding Fathers thought that an educated citizenry was necessary for a republican system of government to work in America or anywhere else.

For example, in 1816 Thomas Jefferson wrote to a friend, “If a nation expects to be ignorant and free in a state of civilization, it expects what never was and never will be. If we are to guard against ignorance and remain free, it is the responsibility of every American to be informed.”

To use another example, James Madison said that “Knowledge will forever govern ignorance; and a people who mean to be their own governors must arm themselves with the power which knowledge gives.”

Because they knew that government by the people would only work if the people were well informed, early American leaders supported freedom of the press. And they went even further than that, getting involved with the media themselves as a way to educate the public. Franklin, Jefferson, Madison, and Hamilton all had their hands in newspapers, whether printing and publishing them, writing articles for them or having others do so on their behalf. When he was president, Jefferson made sure that new territories out west included a funding source to set up local public schools.

Americans already overwhelmingly support solar power and want the economy to use more of it, according to numerous surveys. But Americans usually don’t know much about solar power. As a result, most people may think that solar is becoming one of our country’s top energy sources already and that it doesn’t need any help. Ordinary citizens may also think that utilities are putting

in enough large solar plants on their own that homeowners don’t need to install solar on their own roofs.

One of the most important things that you can do to help spread solar power around America is to start educating people you know about energy. You don’t need to stand at the front of a classroom or a lecture hall to do it. It will be most effective, and come most naturally, if you just talk to people casually about energy and about solar power through your ordinary encounters with them as you go through your daily routine or at relaxed social events.

What Qualifies You to Educate People on Solar

Are you qualified to educate people about energy? Absolutely.

First, as we’ve seen, if you’ve already gone solar yourself, then people who know you will think of you as an authority. And they should see you as an authority. By paying to have solar panels installed on your home, you’ve certainly put your money where your mouth is on solar.

Second, I’m sure that before you got solar panels, you did some research on your own about solar and about your options to go solar. You probably learned how photovoltaic technology converts light into electric power. You may also have learned about equipment such as modules, inverters, and racking. You probably also learned about advancements

in technology that make solar power more efficient and more affordable today.

You certainly got into the economics of solar, especially how many kilowatts of solar capacity you needed to get to cover your home's electricity demand. You also had to learn about financing, whether you should buy your solar system in cash up front, get a loan, lease the panels or just get the electricity through a power purchase agreement. And you probably learned how soon your solar panels would pay for themselves, after which you'd have essentially free energy.

After your journey to go solar, these and other topics relating to electricity and energy may now be familiar to you. But don't assume that other people are as comfortable talking about solar power or electricity as you are. The good news is that Americans are interested in solar. The bad news is that most people don't know much about solar power in particular or about energy in general. And some of the things they think they do know about energy are wrong.

Don't Know Nothin' about Energy

Drivers can tell you the cost of a gallon of gas at the local station on any given day. And most people who pay their bills for their home, apartment, or small business have

been heard to complain from time to time that energy companies make too much profit off the backs of ordinary Americans. As to electricity, most people know how to turn on a light switch, turn down a thermostat—and of course, complain about the power company. And that's about all they know about energy.

Given how important energy is to modern life, Americans' energy literacy is shockingly low. And the biggest problem is that most people aren't aware of how little they actually know about energy. Nine out of ten Americans think they know about energy, and one in three thinks they know a lot about energy, according to a recent study. Yet, when you ask people where their energy comes from, well, their guesses are a bit off.

“Americans seriously overestimate how much electricity we get from renewables,” says a 2016 survey of more than a thousand ordinary consumers from a company called Makovsky that advises the energy industry on communications.¹⁰

When it comes to solar power, the two most interesting numbers are:

- Americans think that the country today gets 11 percent of its electricity from solar power. The truth is, despite rapid growth in the last few years, American's still only get about 1 percent of our total electricity from solar.

- Likewise, Americans think that in five years solar will provide 20 percent of America's electricity. But the U.S. Energy Information Administration predicts that solar will still only produce just over 1 percent of the nation's power. (Note: The EIA's estimate is conservative. Other experts may predict higher numbers for solar power in the next five years, but none of them are even close to 20 percent).

It's safe to say today that Americans do think that the country uses more solar than we actually do. Much more.

Is that a problem? Only if it makes Americans complacent about pushing for more solar.

If citizens think that we have enough solar already, that we'll get plenty more in the future by just letting things go on as they have been, and that grid electricity is basically pretty clean, then they won't see much urgency to demand more solar, especially on rooftops of homes and small businesses.

If they're too optimistic about the ability of electric utilities to provide them solar power if they simply check a box on their electric bill to join their local utility's "green power" program, then ordinary citizens won't worry about whether America is moving in the right direction on solar or not.

In that case, citizens may not bother to demand that utilities start offering more solar to their ratepayers.

Citizens also won't demand that utilities stop trying to prevent homeowners from getting their own solar. And if they think the electric company has got the issue of solar power covered, then families won't bother to make the investment in getting their own solar panels at home.

Solar has accomplished a lot so far just to get to one percent of America's power supply. But obviously, there's plenty of room for growth. You can help make that growth happen sooner rather than later by educating people you know about the role of solar in our economy today and how much potential there is for solar to grow in the near future. Too many people believe outdated ideas or myths about solar that prevent them from taking solar seriously.

For example, while many Americans think that the electricity they buy from their utility has much more solar power than it actually does, other people think the opposite—that there's not much solar today and that there never will be.

That's because, in the minds of these people, solar power is still an "experimental" energy source that requires more "research" to become practical. That might have been true in the 1970s. But it's not true anymore. As solar homeowners can attest from their own experience, solar panels are ready to go up on your roof today. Solar is ready to start producing clean energy at your home right away.

You, as a solar homeowner, are uniquely qualified to bust myths about solar and help spread the truth to the people you know.

In Appendix A at the end of this book is a list of other common myths about solar power along with a short response to each myth that gives the truth. You can use this list in conversations with your friends, family, and neighbors. Or, you can even give your own presentations about solar power.

Become A Local Solar Expert

If you're ready to step up and do more, you can become a recognized solar expert in your local area.

As someone with solar panels, local clubs and groups that you belong to will recognize that you are qualified to talk about solar power from your knowledge and personal experience. And because solar power is such a hot topic these days, local groups know that their members would probably like to hear more about solar. So, if you approach a group that regularly hosts speakers on topics of current interest, and if you're already a member of that group, then if you offer to talk about solar power based on your experience as a solar homeowner, you'll probably get some interest.

Some solar homeowners give talks at local meetings such as those held by homeowners and neighborhood associations, church groups, or a chapter of the Rotary Club. You can even organize your own talk at a nearby public library or offer yourself as a speaker at your kids' school.

Just as it is with educating people you know through conversations about solar, public speaking is not as scary as you might think.

There are ways to make it easier to give a public talk. Some of the groups listed at the end of this book offer free training to help you make effective presentations. If you're an outgoing person, speaking to groups can be fun—and it can help you influence people, maybe even in ways you never expected.

As Ben Franklin wrote, “Hide not your talents. They for use were made. What's a sundial in the shade?” And whether you influence anyone or not, you'll feel stronger and more alive after you give a talk. And you probably *will* influence people, perhaps in ways you hadn't expected.

Because you'll be talking to people who are presumably interested in solar already, you can have a big impact. These are people who are ready for your message and are just looking for some help—and an example from someone like them—to learn more about solar themselves.



FROM THE REVOLUTION: THOMAS PAINE'S "COMMON SENSE"

At a time when many Americans still wanted to reconcile with the British Crown, Thomas Paine argued that after so many attacks on colonists' rights by the British authorities, efforts by colonists to appease George III were against "common sense." While other writers in the colonies believed that King George III would soon rectify the wrongs done to the colonies, in his pamphlet *Common Sense*, Paine wrote that the entire British system was rotten to the core because it was based on a tyranny of aristocracy and monarchy that could never allow for true freedom.

Paine urged colonies to sever their ties to England once and for all and then to set up their own democratic government with a written constitution guaranteeing rule by the people instead of by kings and aristocrats. Leaving the British imperial system would allow Americans to enjoy the benefits of free trade with other nations besides Britain and prevent Americans from being constantly dragged into Britain's frequent European wars.

"Everything that is right or reasonable pleads for separation. The blood of the slain, the weeping voice of nature cries 'Tis time to part'," wrote Paine.

Though it was only a pamphlet of 47 pages, *Common Sense* became the best-selling book of the 18th century in North America, selling 120,000 copies in the weeks after it came out on January 19, 1776. Its ideas were not new, but *Common Sense* was the first publication to put the idea in print that colonists should declare their independence from Britain. And Paine wrote in clear, simple prose that ordinary Americans could understand, gaining him a wide readership.

As a result, the pamphlet strengthened the resolve of those who wanted independence while helping recruit new supporters to the cause. Less than six months after Paine published *Common Sense*, on July 4, delegates of all the colonies gathered in Philadelphia to ratify the Declaration of Independence.

Later that same year, in December of 1776, Paine published a second pamphlet called *The American Crisis*. While his first pamphlet helped push Americans over the edge into declaring independence, this second booklet may have helped save the revolution once it had begun. The second pamphlet's famous words still have a powerful ring today: "These are the times that try men's souls: The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country; but he that stands it now, deserves the love and thanks of man and woman. Tyranny, like Hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph."

Getting copies hot off the press, Washington had *The American Crisis* read aloud to his troops before crossing the Delaware River to attack Trenton, New Jersey, which we'll discuss in Chapter 9. The inspiration that Paine provided helped give the Americans the motivation to take a big risk in facing a formidable foe and, ultimately, triumph both at Trenton and in their whole long war for independence from Britain.

For today's solar patriot, Paine's little pamphlets with the big impact show the power of education to change minds and mobilize citizens for action.

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REFERRALS—HELP OTHERS
TO GO SOLAR AT HOME

*It takes time to persuade men to do
even what is for their own good.*

—THOMAS JEFFERSON

To start with a more recent quote, Ronald Reagan said that “All great change in America begins at the dinner table.” The easiest way to help spread solar is to encourage your neighbors and your family and friends to go solar at their own homes. It may also be the most rewarding for you—financially.

As we saw earlier, research shows that solar spreads more quickly once there's at least one solar installation in a neighborhood. Joining a solar installer's referral program