Solar Panel Interview Extras

More from the solar panel installer interview with Jason Eden, solar panel installer at Rural Renewable Energy Alliance (RREAL).

Jason talks more about his work, the solar energy industry, and the Rural Renewable Energy Alliance in these interview extras.

More on the Rural Renewable Energy Alliance (RREAL)...

Our organization is actually a non-profit. Our mission is to make solar energy accessible to people of all income levels, because currently solar energy is only available to the upper echelons of society. We're trying to address poverty with a clean energy technology. That's our flagship. We do different types of solar energy installations at both a commercial and residential level, but our residential solar heating installations are primarily for low-income families.

We partially depend on grant-funding. We have a unique business model. Non-profits work on the market as well so we also offer our products and services at market rate. Then, whatever revenue we generate we put into our low-income programming and assistance. For example, the product that we develop and manufacture, we also offer at market rate as part of our solar design-build service. We do a lot of solar-electric and solar-water heating installations as well. Those are only at market-rate, while our solar-air heat is for only for our low-income families. We develop a certain degree of self-reliance through our market-rate products so we don't have to be as dependent on grant and donation funding.

Since the recession has started, we've seen a large drop in our market-rate business, and an increase in demand for solar energy assistance. (For more information, check out the RREAL website.)

On how the organization got started...

The organization was established more as a social service agency than a solar energy agency because our intention was to address fuel poverty with clean energy technology. Our primary program, solar assistance, provides supplemental solar heat to low-income families in the energy assistance program.
The energy assistance program is a nationwide program to help low-income families survive the heating season. While it's a really important service, it's just a band-aid on a wound that needs a tourniquet. In Minnesota alone, it costs $80 million to manage the energy assistance program. That's an annual expenditure for 125,000 families who will often need that help almost every year. We're advocating for the inclusion of solar heat into the energy assistance program as a longer-term solution.

**More on the policy work done by Jason and RREAL...**

I love telling the story about the work we do and explaining the importance of addressing fuel poverty with clean energy. We're actually trying to modify the federal energy assistance and weatherization program project to include renewable heat. We've had a lot of success in Minnesota. Minnesota is the first and only state to fully incorporate renewable heat into the state's energy assistance and weatherization program. We really enjoy advocating for that on a larger scale.

**More on the skills and credentials needed at the organization and on the team...**

We have two engineers on staff, and their skills and credentials are very important. To truly design a solar energy system, there are a lot of variables that need to be examined. The more thorough we can be, the more accurately we can provide information on what that system will be able to do. We also have two certified residential energy auditors on staff, because renewables are already trumped by energy efficiency. Energy efficiency is not even the low hanging fruit. It's the fruit on the ground. That is where we start with our clients. A $5 tube of caulking doesn't compare to a $15,000 solar electric system. We always emphasize the role of energy efficiency before solar energy. A lot of people are just star struck with solar and want to jump there, but it isn't always a wise move. We also have general contracting licensures, and within the organization we also have NABCEP (North American Board of Certified Energy Practitioners) certification. In the state of Minnesota, that certification isn't mandated, but we think it might become that way in the future.

**On the recent growth in the solar energy industry...**

Right now, there are a lot of solar contractors and workers in the field that are peddling programs, products, or services that they don't use at their own businesses or homes. To me, it's important to live with and work with the technology before it's offered on the marketplace. The field is really a boomtown right now with so many people getting into the industry. It presents both opportunities and limitations, in my opinion. Incentives and enthusiasm are a double-edge sword, because it seems people are just getting into the industry to make a quick profit rather than understanding the technology and industry and being able to represent it accurately.

For example, being a non-profit in the solar industry, for us it is very important that we accurately represent what solar can and cannot do. People who are in the business for the financial profits seem more interested in exaggerating what solar can do. For example, whenever we give an accurate estimate on a system's return of investment, people are taken back at how long it takes, but it is really just a thorough analysis of what it takes.
Another thing we observe is that there are a lot of people in the industry that aren't frank about solar energy being a site-specific technology. It's not the case that it can work everywhere, despite what people may say. It's both contextually-specific and site-specific. There are many instances where solar is not an appropriate technology to use. We are up front about that, but we are sharing the marketplace with people that aren't as frank about it being a site-specific technology.

The demand for solar-energy is on an upward trajectory. It's hard to look ahead now because of the economic recession, because this snapshot in time might not be representative of the larger trends. I think that the demand for this technology is trailing supply at the moment, so it is hard to determine what will happen in the future. I know there's a lot of interest in getting into the industry.

**On the growth and outlook of solar energy careers...**

We think about this a lot. We recently taught a series of classes on renewable energy and solar energy at a local community college. The message I always try to impart, and tried to hammer home during our class, is that even if you become certified or competent to install these technologies, it doesn't necessarily mean that the market will be there to provide the employment for you.

**More on the growing diversity of the field...**

There are minority populations getting into the field, and we're actually just finishing an EPA-funded training project on the Leech Lake Reservation, where we're training their housing department to do solar heating installations. It's been going really well. There's definitely a lot of interest in the field among disadvantaged communities, minorities, and both men and women.

**More on the misconceptions behind the solar energy industry...**

There are a lot of misconceptions. We have a refrain here about 'Carter era baggage.' President Carter provided a lot of thought leadership, but at the same time a lot of the incentives implemented during his administration led to an almost too rapid industry growth. There was a lot of marginal product, bad ideas, and 'fly-by-night' companies that were insufficiently policed. Because of that, a lot of the products and systems installed during that period were of poor quality and quickly became off-line. There are so many people who have the misconception that solar heat is either ugly, not effective, not cost-effective, etc, and we have to work against that. We’ve been able to prove that it can be cost-effective and esthetically-integrated into existing structures, but we still have to deal with a lot of misconceptions that started during that time.