

Guest on THE INFRA BLOG

Guest on The Infra Blog: Tom Kimbis, Vice-President of Executive Affairs, Solar Energy Industries Association

Conversation with Steve Anderson, Managing Director, InfrastructureUSA

The Solar Energy Boom

We're doing a great job but we can do even better. So in terms of growth, we've been growing over the last eight or nine years. We've been growing at a 60, 70% growth rate. We've seen that even out a little bit from 2013 to 2014, which is the last full year we have on record here of data. But right now we've got over 6,000 homes and businesses powered by the sun. And we are on track this year to install about nine gigawatts of solar energy and five, ten years ago we didn't even install one tenth of one gigawatt in the U.S. We're talking about growing 100-fold in the course of ten years. So we're doing a good job. We've got a long way to go, but we are the fastest growing energy industry in the U.S. and we are second only to natural gas in terms of new energy generation in the United States.

Solar's Benefits Beyond Power

Solar is an outstanding resource in the United States both because of what it does provide, which is clean, reliable, renewable energy, but also what it avoids, which is displacing, depending on where you are in the country, coal or other fossil fuels, or nuclear energy. Now the benefits that are provided on the environmental side: people know that solar is clean; the benefits depend on where you are and what sort of electricity you are offsetting through your use. Coal is a great example of a resource that is important to the United States and will still be used going forward, but in decreasing amounts as we've seen it shrink over time, and a source that emits a variety of pollutants that cause not just climate change, but also air and water pollution as well. So there are benefits to solar beyond just producing power. You also have benefits in the job arena from solar. Solar is a labor intensive energy-generation source, meaning although it has no moving parts and works with very little maintenance once it's installed, it does take a lot of manpower to put it on the roof, so there are a lot of jobs that come out of solar that are impossible to be outsourced.

Policy is as Vital as Technology

I've been involved with this technology at the Department of Energy overseeing policy, but also some of our research laboratory activities, and here at the Solar Energy Industries Association for 16 years. I've seen efficiencies for solar increase over time, and for many years efficiency was talked about as the Holy Grail. What happened about five or six years ago was that innovation in ownership structures, innovation in financing, was realized to be as important if not more important than increasing the efficiency of solar panels. Once we got to a level of efficiency that enabled the solar systems to effectively deliver a significant amount of power to a home or business, it then took innovations in the financing and the ownership structures to enable more

Americans to go solar. So what we need right now is not for panels to double their efficiency; what we really need is to have access to cheaper capital, and to eliminate some of the barriers that exist in states and jurisdictions across the country that make it difficult for people to choose solar. Take the state of Florida, the sunshine state. The dominant means of selling solar power today, which are leasing and power-purchase agreements, are not allowed in the state of Florida. It's taking a constitutional amendment, which is underway right now and gathering signatures, in order to change the rules in Florida that had been written for utilities and to benefit utilities, to allow individuals, homeowners, and small businesses to choose solar.

Pushing the Boundaries of Infrastructure

We've fallen into a state of acquiescence, or just satisfaction with what we have today, when really we could be pushing the boundaries on investing in our infrastructure in ways that make our transportation sector stronger and safer, and in ways that make our electricity grid more robust and reliable, and in the end help our national security while making our everyday lives better. I think this disengagement is not the fault of any one individual or family; people are working hard to try to get bread on the table, but as policymakers consider what priorities to tackle, infrastructure seems like a tough one today because it's such a large undertaking. But we have to be strong and we have to be brave. We have to tackle those issues that are important not just to this generation but to the next one as well. We did this when we built the first electric grid, over time, and it's taken a century to do it, and it doesn't look very much different from when Thomas Edison was around. We did this in the 1950s with the Eisenhower Interstate System. We need to look at the electric grid and the transportation modes in a way that propels us to continue to be the leading nation for decades to come. That requires investment, and it also requires creativity. Thankfully, we do have a long track record of entrepreneurial success and innovation in America. I'm very hopeful that we'll see innovation come from the private sector in electric vehicles, in storage technologies, and other areas that can aid our infrastructure where we've seen the public sector fail to step up to the plate.

> www.InfrastructureUSA.org 212.414.9220 info@infrastructureusa.org