

Solar Energy on the Rise

As our calendar clicks along with Summer fast approaching, soon we will be seeking respite from the blazing sun and likely our 100+ degree sweltering days. Yet, with each passing year, the sun, more specifically solar energy, is becoming a growing, positive way to help keep Americans cool during those Summer afternoons.

In fact, according to the Solar Energy Industries Association (SEIA), 2013 was another record year for the U.S. solar industry. There were 4,751 MW of new photovoltaic (PV) capacity installed in 2013, representing a 41 percent increase in deployment over installation levels in 2012. That's the most installations in any year, ever. Solar accounted for almost 30 percent of all new electricity generation capacity added in 2013, up from just 10 percent in 2012, which made solar the second largest source of new electricity generating capacity behind natural gas. And as we Oklahomans know, we are blessed with significant amounts of natural gas below our Earth's surface, accounting for as much as 10% of America's domestic production. Likewise, we know we are similarly blessed with significant sun exposure (aka opportunity), with an almost 70% rating for sun exposure during every waking hour, according to the National Climatic Data Center.

This "% Sun" number measures the percentage of time between sunrise and sunset that sunshine reaches the ground and our measure of 68% for Oklahoma City places us above southern cities such as: Atlanta, Dallas, and even hot Houston. Our City's sun exposure rating is actually tied with 'sunny San Diego' and so we have tremendous opportunity to integrate this daily, free fuel source, into our daily energy needs.

A few statistics from the SEIA that helps convey this fast-growing trend:

- There are now over 13,000 MW of cumulative solar electric capacity operating in the U.S., enough to power more than 2.2 million average American homes.
- There were 140,000 new solar installations in the U.S. during 2013, bringing the total to over 445,000 Photovoltaic (PV) systems operating today.
- The utility market led the charge again with 2,847 MW of PV and 410 MW of Concentrating Solar Power (CSP) installed in 2013, including our neighboring Capitol city of Austin, Texas where they are adding utility scale solar for their customers' benefit.
- Year-over-year, the national average PV installed system price declined by 15% to \$2.59/W in Q4, which is becoming very competitive versus traditional fuel sources of coal and natural gas.
- The average price of a solar panel has declined by 60 percent since the beginning of 2011 and many Americans are finding affordable value

And forecasts for this year?

Close to 6,000 MW of PV are forecasted to come online throughout 2014, which represents an incredible 26% growth over 2013's own record installation totals. 2014 will be a record year for CSP as 840 MW are expected to be commissioned by year's end, with more and more Utilities moving towards this now affordable, clean energy option. Together, new solar electric capacity projected to be added in 2014 will generate enough clean energy to power over 1.13 million average American homes and that includes running those air conditioners throughout August when the heat (and the cost of electricity) are typically the worst of the year.

So whether you are considering adding some smaller scale solar to your own home or business, or whether you are talking with your neighbor that happens to work for the local electric Utility, please know, as The Beatles once predicted: Here Comes The Sun.

Now more than ever.

This article first appeared in the Journal
Record: <http://goo.gl/5xRQ1D>