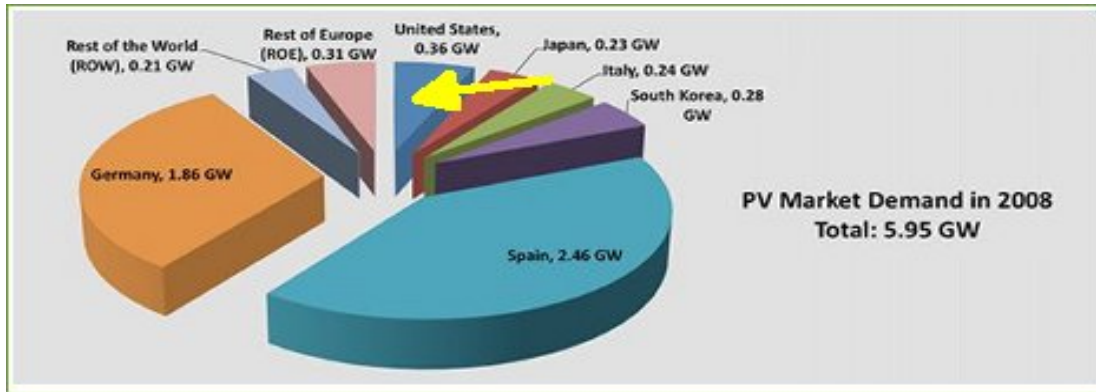


US Lagging In Solar PV



It was a [proud moment indeed](#) when we turned around and realized that the US was leading the world in wind power production. Sadly, though, we can't say the same thing about PV power production; not only are we not number one, but we're not even close. Here are some sobering statistics that came out of a recent report on world PV markets by Solarbuzz, a solar research and consulting company:

- The world's demand for PV power grew about 110% last year. The world now demands just under 6 GW of PV power. Spain's share of that 6 GW is 2.46 GW. Our share? A measly 0.36 GW.
- In the last year, China and Taiwan's market share of solar cell production has risen from 35% to 44%. Meanwhile, our own market share – which was about 45% in the mid-90's – has dropped to about 10%.
- Of the top ten largest PV production plants in the world, guess how many are in the US? Zero, that's how many.

As the author of [Climate Progress](#) notes, we invented PV technology! So why are we lagging behind? Some might claim that sunny countries like Spain have an easier time capitalizing on sunlight. I would have a hard time believing that Spain has that much more sunlight than the entire Southwest, though.

Others would point out that PV just isn't our weapon of choice when it comes to utility-scale solar electricity production, compared to solar thermal technologies. As long as you have ample land resources and workable land usage laws, solar thermal can deliver lower cost per watt. So maybe we're just more of a solar thermal country than a solar PV country.

Really, though, it boils down to policy. European countries like Spain, Germany and Italy are no sunnier than the US, but their policies are. They have been pouring funds into subsidies for renewable power generation – that's why so many GW were installed. And you know what? Now that the fixed costs are taken care of, these countries have energy-producing assets that run on free fuel. What could be a sounder investment in today's economic climate?

I think we're getting the message, though. We're starting to offer serious [tax incentives](#) for installing solar, too. And big utilities like [PG&E](#) are making plans for large scale PV in addition to solar thermal. Maybe next year we'll reclaim some of that market share.

Via [Climate Progress](#)

Candles are Ten Times worse for the Environment than Light bulbs



I know, I know, incandescent light bulbs are the devil. The fact that any of us still use this antiquated technology is a testament to our stupidity as a species...BUT!

It's actually far more efficient than any other light source from Edison's day. A 40 watt light bulb produces about as much light as 40 candles. If you burned 500 candles instead of using a 40 watt light bulb, you would be burning several gallons of paraffin (refined from crude oil) per day, resulting in about 10 times more CO2 emissions.

Of course, we don't burn 40 candles. We burn one or two or three. So, yes, paraffin candles are not a significant polluter. When I switch off my lights this Earth Hour, and light my candles, I will be replacing 12 watt CFL with three candles. The result, honestly, will be about neutral. The candles will produce a little bit more CO2 than would be produced by the CFL. (Thanks, by the way, to [enochthered](#) for doing all the math for me.)

The big difference is the amount of light I'll have to work with. With just my candles burning, chances are my wife and I will have a hilarious dinner in which we can't find the forks, and then we'll try to read our books without enough light to actually read them and then, probably, we'll find some darkness-related activity to entertain ourselves.

And yes, that sounds lovely, but the candle is not saving any energy, it's just making the world a little softer for one evening. And, hopefully, it will remind us of the gifts that technology brings us, so maybe we can not take them for granted quite so much.

Nissan Shows Off Electric Wheels, Pals Up With San Diego G&E



Although we hope to see a day in the not-too-distant future when all major car companies are riding the electric car bandwagon, right now there are only a few that are brave enough to really take the plunge. Chevy is coming out with the Volt, of course, and Toyota has something in the works, but Nissan is leading the pack in terms of ZEVs.

A note on the lingo: ZEV stands for Zero Emission Vehicle (it's not the name of a car), as opposed to just EV which stands for Electric Vehicle. The Volt will be an EV, meaning that it will run on an electric motor. But, since it will contain a gas engine to kick in should the electric motor run out of juice, it does not qualify as a ZEV, which is entirely electric.

Nissan has a prototype 5-seater ZEV that will be ready for sale in 2010. Don't get too excited, though – you aren't going to get one. At first, Nissan's car will only be available to be purchased in fleets. By about 2012, though, they will be sold to the mass market. And Nissan [promises](#) they will be cheap. I'm not going to hold my breath, since the Volt was also supposed to be "cheap", and now it looks like it will cost over \$40k. But if Nissan's promise comes true, their ZEV will be cost competitive with cars like the Honda Civic. And that's before the \$7,500 tax incentive being offered as part of the stimulus bill. That means it could cost you less than \$20k.