



## **Is Efficiency More Cost-Effective than Solar?**

Is efficiency more cost-effective than solar? This question has been coming up more and more lately, so I thought it high time the subject was addressed. As one who has dealt with both efficiency and solar for over 30 years, from feasibility studies to the nuts and bolts of installation, I've never seen such polarity in the industry. By polarity I mean people in the efficiency business are saying solar isn't worthwhile, and people in the solar business are saying efficiency isn't worthwhile. So who's right in this energy turf war?

The answer is simple – they're both right - at least part of the time! Let's pick on solar first. Being that I hang out in both circles I can tell you first hand that the reason efficiency folks talk dirt about solar is because photovoltaics (solar power) has been overwhelming popular for the last decade or so. It's so "new age", "high tech" and "space age" it's been getting all the attention, relegating efficiency to "old hat" status (yawn). Before I go on, I should mention that solar water heating is (unfairly) enjoying the same "old hat" status as efficiency right now. OK, that said, we all know some homes are simply buried in the trees and, as a result, don't have any solar potential unless some serious tree removal or trimming is done. So assuming people want to keep their trees "as is" there's one obvious strike against solar!

But more common are situations where people's homes are so inefficient that, from a cost/benefit standpoint, they'd be far better off focusing on efficiency first and then solar (if they have any money left). This applies to most existing commercial buildings as well as homes. And, given this economy, it could be that energy efficiency is all they can really afford. But from my experience it's common to find a salesperson has already talked the building owner into installing a solar power system first, and then I get a call to see what else they can do with what little funds (if any) they have left!

OK, so now let's pick on efficiency. There's a new breed of contractor out there called a "Building Performance Contractor" and I'm one of them too (I joke that I wear ALL the hats!). In the training classes, literature, and professional groups you're constantly being told – straight up – that solar makes no sense at all if you make your building all that it can be through efficiency measures. The only problem with this line of logic is that cost/benefit and the concept of "point of diminishing returns" don't seem to matter to most folks in the performance contracting crowd. I should add, to be fair, that performance contracting addresses issues that solar doesn't; things like indoor environmental quality, health & safety, and comfort, to name a few. And those things can be important, even critical in some cases. But that doesn't justify mischaracterizing solar as unimportant.

This ongoing turf war is one of my biggest pet peeves, even though our company installs solar power and it's far more profitable for us than our efficiency or solar water heating work. So maybe I should just shut up and promote solar power over everything else. It would be way better for our bottom line. Unfortunately I can't in good conscience avoid focusing on "the big picture" in every building I see because I know a mix is usually the best choice.

The “Big Picture” is, in my way of thinking, about getting the most for what we can afford (or are willing) to spend. It’s about return on investment, comfort, environmental benefits (indoor and out), and the health and safety of every one of us in terms of our households and our country. Solar power, solar water heating and energy efficiency all have important roles to play. But every building is different in terms of what’s most cost-effective. And every building owner has a budget, unless we’re talking about folks like Donald Trump (Don – if you’re reading this, give me a call – I’ve got a giant solar electric system to sell you).

But what our households and buildings need now is to get practical, which I equate with “sustainable”. We need to acknowledge that we can’t afford the old “one size fits all” approach any longer and that when it comes to energy solutions, there’s actually synergy possible when employing both efficiency and solar. So, to my professional friends in both camps, get over it folks and learn to appreciate the “Big Picture”. Our society will be so much better off for your efforts!

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