Overcoming Commercial Solar Savings Myopia: Seeing Long-Range Benefits More Clearly

People who are nearsighted typically find it more difficult to read road signs or see distant objects clearly. It's a condition easily corrected with the right pair of prescription lenses. But those looking to purchase a new commercial solar panel system may not even recognize they have a form of "investment myopia" that's preventing them from seeing beyond upfront installation costs.

Focusing on some of the factors that impact the longer-term view of commercial solar savings could be just the prescription needed to make the right decision now. This clarity will help you and your business see that the best solar option is the one that provides the largest net savings over its lifetime.

Solar Energy Cost Per Watt vs. Cost Per What Really Matters

Comparing commercial solar power generating systems appears, on the surface, to be relatively straightforward. Simply add up the initial investment expenses and then divide that figure by the total watts of the project to get a "cost per watt" figure.

The system with the lower cost per watt is then the obvious choice, right? Not necessarily. Learning to look beyond upfront costs can offer a more comprehensive and intelligent method to value a commercial solar investment long-term. The higher cost per watt option may prove to be the better deal in the long run—offering better value and ultimately, greater savings.

Cheaper vs. Better Solar Panels

Have you ever heard carmakers touting "initial quality" awards for their new vehicle? One hopes the initial quality of a brand-new car is good! But what is the quality level 100,000 miles down the road?

A low-quality car that initially costs less may be more expensive when you start factoring in poorer gas mileage and repair bills. The same can be true for commercial solar panels. Here are some things to consider when buying solar equipment:

- Efficiency: A solar panel's efficiency rating refers to the portion of sunlight energy it can convert into electricity. If its cells are more efficient, fewer panels are needed to meet electricity production goals—which can save money over a solar system's lifetime.
- Production/yield: Daytime position of the sun, time of year, level of cloudiness, geographic location and shadows all impact the amount of energy a solar panel produces. In addition, not all commercial solar panels are created equal. How consistently and effectively a commercial-grade solar panel performs in various conditions directly relates to its production and yield.
- Durability: Assessing solar panel durability is critical if the equipment is expected to be exposed
 to harsh environmental conditions. Will it be located near the corrosive sea air of an ocean coast?
 Can it handle the extreme heat of a desert? Greater solar panel durability can also lead to lower



operations and maintenance (O&M) costs. Although commercial solar systems are surprisingly easy to take care of, more durable panels are generally easier to maintain.

• **Degradation rate**: All solar cells degrade over time. That is, they produce less energy each year over the solar panel's lifetime. Accurate predictions of decreased power output over time can help determine a more accurate return on investment (ROI). The lower the degradation rate, the more electricity your panels can produce, which means more savings over the system's lifetime.

Investing in top-quality solar panels at the start may appear to be more expensive than going with a lesser option, but as the above list illustrates, quality matters. It's important to partner with a reputable solar company willing to back its products with guarantees.

Solar warranties: Read the fine print

Most commercial solar panel manufacturers offer two types of warranty:

A solar power warranty usually guarantees a system will produce electricity at a predictable rate over the first 25 years of a panel's life. If a panel's output falls short of the guarantee, the power warranty should cover replacement costs.

The product warranty, the most important warranty, guarantees the workmanship of the panel. However, how a warranty is honored can be even more important than what it covers. Does it pay for the removal of defective modules? How about the expenses associated with the shipping and installation of replacements? If the answer is "no"



to any of these questions, it could mean there may be significant costs to maintaining a commercial solar system lurking in the future—especially for lower-quality panels. Read carefully.

And remember—a warranty is only as good as the company that stands behind it. Be sure to check its history, current stability, and customer satisfaction. For a product that lasts 30 - 40 years, it's important to find a partner that will provide support throughout. Investing in quality solar equipment that has the full backing of the manufacturer can save you headaches and money down the line. It's an investment in value and savings.

More Really Can Be Less

These are just a few examples of factors impacting the long-term value of a commercial solar project. They illustrate how total "cost per watt" offers a nearsighted and potentially deceptive view of the true value of commercial solar benefits. Paying a bit more now can mean spending less later; spending less now runs the risk of much higher costs down the line. The best solar option is the one that provides the largest net savings over its lifetime.

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