

# WHAT'S YOUR SOLARIQ?

# What's Your **Solar IQ?**

# Solar Power for Commercial Building Owners

With all the talk about renewable energy and rising utility costs, it can be difficult to separate the hype from the headlines when it comes to solar power. Nevertheless, solar presents new and exciting opportunities for commercial property owners, especially when it comes to HVAC.



# What Is California's greatest asset?

#### Sunshine!

As the most plentiful energy supply on (or above) Earth, it makes sense that solar power is in high demand, especially here in Southern California where the world's largest solar thermal energy plant is the <a href="Ivanpah Solar Power Facility">Ivanpah Solar Power Facility</a> in the Mojave Desert. Solar also makes sense for anyone concerned about their company's environmental impact and carbon footprint, since it emits far less greenhouse gases than conventional fuel equivalents. After all, who in Los Angeles isn't worried about pollution?

## Are there advantages to solar energy?

#### Of course!

It is difficult to find disadvantages to using this natural resource, yet solar energy may not be right for all commercial buildings. Being aware of both the positive and negative considerations of solar is critically important for any commercial consumer. All solar energy opportunities are not created equal. Understanding some of its benefits and drawbacks is helpful when it comes to deciding whether green energy makes sense for your commercial property.



#### Can solar lower operating costs?

#### Yes!

A great solar system can significantly lower your operating costs year round, locking in low energy rates for years to come. With energy unit rates continuing to <a href="mailto:skyrocket">skyrocket</a> in California against a sea of new regulations and environmental concerns, the benefit of solar provides no small advantage for the commercial building owner concerned about their bottom line. It's also possible to save money by taking advantage of federal tax credits.



#### What maintenance is required?

Once you've <u>installed</u> the right panels on your building, the system usually requires very little in terms of maintenance. There are no moving parts to a solar panel system. Reputable solar power manufacturers routinely offer 25 to 30-year warranties on equipment. A good rain will keep the panels dust-free. With the lack of rain, a hose will do the trick, and return your investment to peak efficiency.



### How do I know if the solar panels are working?

Look at your new energy bills! They will be a fraction of what they were when you were relying on conventional energy sources. And those surprise utility costs are now avoided. From a data analysis standpoint, you can audit your solar power use as a whole or by the panel, in real time. Most solar systems provide features to allow you to monitor your energy use and track exactly how much you save.



#### Do I have to change my HVAC system?

Keeping your building at the right temperature for your equipment and employees is the single highest electrical cost for commercial property owners. The cost benefits of solar energy when it comes to HVAC are undeniable. You may not need an entirely new system if you decide to go solar. It may be possible to modify your current equipment to accommodate the panel-generated electricity.

#### What if I have too much, or not enough, power?

Installing solar panels does not take your building off the electricity infrastructure in your area. The utility companies have created programs for you to sell them your excess energy. In other words, your utility meter could actually run backward instead of forward. Conversely, if there are a series of cloudy days with no sun shining, or if your business runs during the night, power from this infrastructure is still available to you.

### Are there marketing benefits to going solar?

From a marketing standpoint, a business that relies upon green energy is always desirable, and a significant marketplace differentiator in almost any industry for consumers, commercial tenants and employees. Companies identifying themselves as "green businesses" not only save money when it comes to energy costs, but are linked in the consumer's mind to cleaner air and healthier communities than their conventional counterparts.

Nielsen Research recently has showed that more than 66% of consumers are willing to pay extra for products and services from companies who are committed to positive environmental impact.



# Does solar add value to my commercial property?

#### It sure does.

From an investment standpoint, buildings with solar power are often far more attractive to buyers than conventional properties. Lower operating costs and higher tenancy rates (from the desirability of a "green" building) are significant assets to the real estate investor or property buyer.



### Are the installation costs expensive?

While start-up costs may be of consequence, the day-to-day savings on energy will be significant. Essentially, while the long-term benefits of this energy revolution are clear, short-term drawbacks are also apparent. Panel installation is a serious investment, and high quality solar systems are not cheap.





# What should I know about service providers?

Solar is a "hot" industry, and not just because it's a sensible energy resource. New companies spring up often to take advantage of this opportunity. Do your research on manufacturers and installation companies before signing a contract. Poorly installed systems, cost overruns and equipment failures are common with less reputable, less experienced companies. Don't get caught with a 30-year warranty from a business that will soon cease to exist.



# What if my building is partially shaded?

Solar energy is limited to sunny areas and buildings without major tree, building or cloud cover. While a commercial property nestled in the shade of a hundred oak trees may be quite attractive, it also may not be a good candidate for solar power. Indeed, solar power is often not tenable in locations that are frequently overcast or foggy. In other words, Seattle HVAC users may have access to the best coffee in the United States, but when it comes to solar power, forget it. A building must have total sun exposure to make solar power a feasible option.



#### How large a rooftop do I need?

Finally, space is also a consideration when it comes to installing solar panels. If your commercial building is very small, there may be limited benefit to installing a solar energy system. Luckily, your <a href="https://example.com/hvAC consultant">hvAC consultant</a> can help you determine ahead of time whether the cost savings will make sense for you. Look at the data before signing the check.



#### Whom do I call for more answers?

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