EcoMotion — *The Power of the Increment*[SM]

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BASICS of COMMERCIAL SOLAR

Frequently Asked Questions

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Why should I consider solar for my commercial building?

If you live in a place that gets plenty of sunshine, it's natural for you to consider solar as a free, unending source of power for your business. The benefits of solar are well known – it saves money on your electricity bill, allows you to use "clean energy" and thus avoid using "dirty" energy that is generated in large, fossil-fuel-burning power plants. And for many businesses, making a "green statement" has an important value, too.

Does solar actually make money for me?

Not every solar system "makes money" immediately. In fact, most have a payback of the investment after 7-10 years, or even longer. However, AFTER the payback is when solar starts becoming exciting as an investment. Over its lifetime, a solar system can easily return 4-5 times what you paid for it.

A good solar potential analysis will show you what you can expect given your site and your utility bills.

***Caution**: Solar installers will encourage you to put up the largest system possible. From an investment standpoint, bigger may NOT be better. Look for the "sweet spot" where you are getting the absolute best return on your investment.*

Can solar produce all the power I need for my business?

The amount of power you can produce depends solely on how much unobstructed space you can devote to your solar system. And naturally, how much power you need depends on the demands of your building. For example, a single-story building with a large roof may be able to generate as much as 50% of its needs. A multi-story building, with a relatively small roof space and a lot of energy demand (for example, a data center), may only be able to cover 10% of its needs.

Once I have solar, do I keep paying for electricity from my utility?

Solar gives you power during the day. You may need more than what your system produces, and naturally, you will also need power when the sun isn't shining. So, you will remain connected to the grid through your local utility. The utility will credit you with the solar you are producing, and continue to provide you extra power whenever you need it. So, you will continue to pay the utility – but your bill will be less to account for the power you're producing on site.

This concept of getting credit for the power you produce and paying for the power you draw from the grid is called "Net Energy Metering."

How much can I expect to pay for a solar system?

The cost for a solar system is made up of several components. First, the equipment: the panels themselves, the racking (the mounting system), and ancillary equipment (inverters, conduit, wires). Next comes the cost for labor. Traditionally, the costs for equipment and for labor have been about 50-50%. However, this proportion can change depending on the current price of panels (which have been going down), and on additional costs associated with your site, such as the need for long trenching runs, digging through and then replacing a parking lot surface, etc. Right now, depending on the size of the commercial system, costs are ranging from $5 - $7/watt.

***Caution**: Price isn't the only thing that can be negotiated in a solar contract. Other items to consider include timing or scheduling, performance guarantees, and bonuses or penalties.*

What is the impact of incentives on the price of solar?

Everywhere in the country, the costs of a solar installation are reduced by the Solar Tax Credit, which allows for 30% of the cost to be taken off in the first year as a credit against taxes owed. (The Solar Tax Grant, in lieu of the credit, is available much more quickly.) Commercial systems also take advantage of accelerated depreciation, which can reduce the upfront cost by another 20-25% or more. Different states and even cities may add their own additional incentives. In California, for example, the California Solar Initiative (CSI) offers a rebate for every solar system installed. (The rebate is administered through the local utility.) Together, these incentives may easily reduce the cost of a solar system by as much as 50-60%. This is why solar has become so popular over the past few years.

***Caution**: Rebates change often, and suddenly. Be sure to stay up to date with current rates and terms.*

How long will my solar system last?

Solar is a long-term investment. Solar panels are tough – and are guaranteed for 25 years. Other components are typically guaranteed for 10 years. You can expect your system to operate well past that 25 year mark.

Over time, the ability of the system to produce power may fade slightly – perhaps .5% per year.

But unlike most investments, which lose value over time, your solar system becomes more valuable over time. When the cost of utility-provided electricity goes up -- price increases have averaged around 6% annually over the years -- your already-paid-for solar power is worth more and more.

How do I maintain my system?

Solar is a low-maintenance item. A typical maintenance schedule includes once or twice a year cleaning of the panels (probably simply with water), and an annual visual check of the connections.

The most important maintenance service is provided by the monitoring device attached to your system. It will tell you if a panel isn't operating, so repairs can be made immediately.

How long does it take to install a system?

A solar project is like any construction project, requiring planning and permitting before actual installation can take place. The planning phase may take several weeks or even months; getting the panels up on the roof can usually be accomplished in just a few days. Then the system must be connected to the grid, which may take a few days more.

How do I find a good installer?

Competition is heavy for solar jobs. Issuing a clear and detailed Request for Proposals (RFP) gives you the best chance of getting qualified bidders. Naturally, they will expect a walk-through of the site before they submit their proposals. If the RFP is structured properly, the resulting bids will be easy for you to compare and will result in the best prices.

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EcoMotion, headquartered in Irvine, CA, has helped manage City-sponsored Solar Santa Monica for four years. During that time, EcoMotion has visited and advised hundreds of homeowners and dozens of commercial property owners on the feasibility of installing solar. Expanding beyond that program, EcoMotion has maintained its "honest broker" approach. The company has developed a database of qualified solar contractors, and a solar project checklist of over 134 items that helps keep a project on track and out of trouble.

View a list of projects at http://www.EcoMotion.us/solar_works.html. To discuss how EcoMotion's independent "Owner's Representative" services might help with your project, contact EcoMotion President Ted Flanigan directly at (949) 450-7155.