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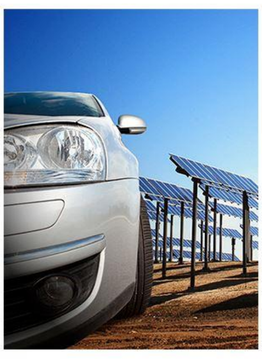
Funding Commercial Solar Projects: How to Get that Photovoltaic New Car Smell

Not so very long ago your choice for financing a new solar energy system was simple—come up with the money to pay for it. Today, the solar industry is more financially sophisticated, offering a number of different ways to make this renewable energy resource a reality. The key is to find the commercial solar funding option that best fits the needs of your organization. However, if you don't know what you don't know, that effort can seem pretty daunting.

Fear not! On a very basic level, you really only need to focus on three fundamental approaches: Purchase, Lease, and something known in the industry as a Power Purchase Agreement (PPA). Sure, things can get a bit more complex once you start nailing down a final agreement for any one of these options, but this article will get you headed in the right direction. It will, in short, help you know a bit more about what you don't know... yet.

Purchase Solar Panels?



Purchasing a photovoltaic (PV) system directly is a lot like buying a new car outright. Whether you have cash in hand or plan to finance through a third-party lender, signing one check to the dealer gives you immediate access to all of the factory incentives and other benefits that may be directly available to you. As soon as your payment clears you can drive off the lot with your sweet, sweet ride. It's the quickest, most streamlined approach to getting on the road.

There are similar benefits to making an upfront purchase of a new solar panel system. But before taking the keys, you need to answer a few questions. Does your organization have the available capital or third-party line of credit to make the commercial solar investment now? Do you plan to stay put for an extended period of time? (Packing up solar equipment is considerably more complicated than moving office furniture!) Are you comfortable with solar system operating and performance risks? And perhaps most important—does your business have the appetite to absorb all of the available tax credits and accelerated depreciation that comes with adding such an asset to your company's balance sheet? The current federal 30% Investment Tax Credit (ITC) for solar energy is only attractive if your business can take full advantage of this and other incentives. (Be sure to consult your favorite tax expert before signing anything.)

So if your organization has the cash or credit available to sign a single check to your solar equipment provider, doesn't plan on moving its facilities any time soon, wants to take advantage of various local, state and federal government incentives directly, and likes to keep business arrangements relatively simple, an upfront purchase may make the most sense. A properly designed solar installation with plenty of available sun can generate enough savings to pay for itself within a few years. And if you keep up with its operation and maintenance, you can enjoy the renewable energy and savings it generates for 25 years or more.

But if you don't want to tie up all of that money at once...

Lease a Solar Panel System?

Back to the auto showroom for a minute. Maybe you want all of the benefits of driving a new car but don't want to spend a large chunk of money (or take on additional debt if your cash payment was funded by a third-party loan). If you're willing to properly operate and maintain your new dream ride (electric, of course), there's a good chance the dealer will have some leasing options for you. Assuming your credit is good, you'll enjoy many of the benefits of ownership (as well as some of the responsibilities) without the higher cost of buying or financing the purchase. At the end of the lease, you can decide whether to buy the car and keep it or simply part company.

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In many ways, the same goes for leasing solar equipment. While it can be a bit more complicated, the underlying goal of leasing a solar system is the same: get the benefit of using it at a lower upfront cost. A lease also provides a convenient way to fully monetize all of the tax incentives available to the solar installation project. As with a purchase, a lease allocates system operating and performance risk to the lessee.

How the lease is treated on financial statements depends on its structure. There are two basic types of solar leases under current GAAP (Generally Accepted Accounting Principles) rules to consider:

- A **Capital Lease** is treated as a liability on the balance sheet (similar to a loan) and can provide 100% financing over the life of the system. If you take one on, you would enjoy many of the rewards (and responsibilities) of ownership immediately without a large outlay of cash. Depending on how a particular solar lease agreement is structured, you may even be able to purchase the equipment, or renew the lease, at the end of the term of the agreement. (Be sure to ask your favorite tax expert how a capital lease is shown on your balance sheet as an increase in liabilities and leverage.)
- An **Operating Lease** is another option which allows the use of the solar equipment, but does not convey any rights of ownership. In other words, the solar equipment does not appear as a liability on your organization's balance sheet (though disclosure of future minimum lease payments may be footnoted). Because an operating lease is considered "off balance sheet," it is reported on your organization's income statement as a rental expense. (Tax expert talk again!)

Please note that GAAP rules pertaining to lease accounting are expected to change in 2019 with almost all leases being treated as on-balance sheet liabilities similar to a capital lease treatment.
In general, a solar lease allows your organization to rent a solar power generating system for a regular fixed payment. Minimal upfront costs reduce capital investment and you may be able to take advantage of some government solar tax incentives directly. On the other hand, you may also be taking on many of the risks and responsibilities of ownership—insuring, operating, maintaining, and managing the solar panel operation.

Perhaps you're not interested in anything even remotely associated with the work that goes into a solar installation. You can still enjoy the benefits of lower-cost solar energy without an upfront cash expenditure, recurring lease payment or responsibility to running the equipment...

PUBLIC FINANCING
Okay, there is a another option for solar financing if you happen to be a public entity able to take advantage of special incentives, tax-exempt leases, or exclusive government subsidized bonds not available to corporations. It gets fairly complex (check out this business brief for more information), but done correctly, modest financing coupled with low interest debt can be enough to finance public solar projects. If your organization falls into this camp, it's well worth exploring the various options available since public agencies can often realize the greatest returns on this investment in solar energy.

Enter a Solar Power Purchase Agreement?

You may not realize it, but you probably already participate in a PPA in your private life. Take a look at your electricity bill. Chances are you've already agreed to purchase electricity from your local utility at a pre-determined rate. That's a form of a Power Purchase Agreement!

A solar PPA allows your organization to "host" a system at your facility. Outside owners construct solar equipment on your roof (or parking lot or unused land in the back 40) at no expense to you. The investors in this equipment generate clean, renewable, solar electricity—and your organization agrees to buy it at a pre-determined rate, over an agreed period of time. You get to benefit from going green without the initial capital expense or responsibility for ongoing maintenance and production costs. A well-structured PPA can reduce your electricity payments immediately as well as allow you to realize increased savings over time as more traditional electricity prices continue to rise.

Be aware, however, unlike purchasing power from the grid on a month-by-month basis, PPAs are a form of financing and have different requirements from buying electricity from the local utility. Solar PPAs allow companies with a limited appetite for tax credits and tax-exempt entities like municipalities and colleges, to reduce their electricity bills immediately while also demonstrating a firm commitment to sustainability in their local community. The key to a successful solar PPA is crafting an agreement that proportionally benefits the host, installer, developer, and various investors associated with the solar project. With a well-designed PPA, everyone wins.

Time to Drive a New Solar System?

To recap, there are many possible roads available that can lead to financing your new solar equipment (for more information, read How Businesses and Public Entities Can Pay for Solar). Each route starts with one of the main "on-ramps" outlined above. You'll need to do some more research as you head farther down the path you choose, but the first step is to pick your main route. Whether it's buying, leasing or hosting through a PPA, the current availability of extended tax credits, continued inexpensive debt, and an increasing desire by investors to "go green" makes it easier than ever to put your company in the driver's seat when it comes to solar power.