

The Tower Companies Seeks Solar as Opportunity to Engage Stakeholders on Sustainability

The Tower Companies is a developer and owner of multi-tenant office, multifamily, retail, and mixed-use lifestyle properties in the National Capital Area. Tower is committed to being an environmental leader in the real estate industry and is continuously striving to find opportunities to engage with stakeholders on sustainability. To help achieve this goal and attract sustainability conscious tenants, the Tower Companies pursued the [first solar photovoltaic \(PV\) installation](#) on a large, class A office building in Washington, D.C.

Project Keys to Success

After exploring solar for many years, in 2013 Tower Companies partnered with Direct Energy Solar to identify potential projects. After six months of investigation, the two organizations decided to install a 30-kW a 12-story downtown office property to capitalize on higher visibility, client interest and more valuable sustainable renewable energy credits (SRECs).

The solar installation would contribute to the sustainability profile of the property, which was already certified LEED Gold and ENERGY STAR certified with a rating of 86, performing among the top 14 percent of similar buildings nationwide. Due to the building’s height, the Tower Companies and Direct Energy Solar had to work closely with the D.C. Zoning Team to review and approve the proposed system design to comply with wind loading and city zoning requirements. The project team also had to diligently engage with PEPCO, the utility provider, as the inspection and approval process for the new incentives presented several stakeholders for all stakeholders.



The Tower Companies solar roof-top installation on large class A office building in Washington D.C.

SOLAR PROJECT SPOTLIGHT

Date Installed	2014
Location	Washington, D.C.
Installation Type	Roof mounted, American-made panels
Size	29.43 kW-DC, 109 panels at 270 W each
Annual Production	37,500 kWh/year
Electricity Offset	1%
Bill Savings	\$50,000 saved over 20 years through 2034
Expected Payback	5.5 years
Financing	Cash purchase

Financing

The Tower Companies often utilizes a gross lease under which clients have a “base year” of operating expenses based on the total square footage of their rental space, and only pay for annual operating expenses above the “base year” amount. Because the Tower Companies implemented energy efficiency measures and the solar PV array, energy costs have decreased significantly year over year and represent – on average – less than 15 percent of the operating budget.

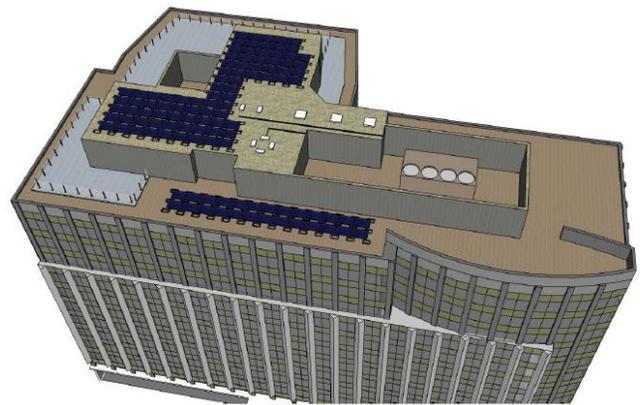
Tower Companies used an upfront cash purchase for 60 percent of the total cost of the project. The remaining 40 percent was provided through three years of upfront Solar Renewable Energy Certificate (SREC) sales to Direct Energy Solar. Additionally, the Tower Companies was able to take advantage of the MACRS Accelerated Depreciation and the 30 percent Federal Investment Tax Credit.

During the project payback period of 5.5 years, 75 percent of the total initial cost will be recovered in the first two years through the 30 percent tax credit and upfront SREC sales. Further SREC sales, depreciation, and electricity savings will return the remaining balance over the next three and a half years. Additionally, Tower Companies often utilizes a gross lease under years.

In addition to the attractive financial payback, the Tower Companies uses the solar installation to attract tenants and engage with stakeholders. The building has a live dashboard display that provides real time information about the energy produced by the solar installation. The company also provides scheduled tours and hosts industry events to demonstrate the energy-efficient building and the solar PV project, hoping to serve as an example for other building owners in the region.

KEY TAKEAWAYS

- ▶ Consider strategic benefits beyond financial metrics when evaluating potential projects. Industry leadership, tenant attraction, and stakeholder and community engagement are all important factors.
- ▶ Track federal, state, local and utility incentive programs to capitalize on opportunities to reduce the project cost. Incentives can have a dramatic impact on payback and other financial metrics.
- ▶ Coordinate directly with utility to understand and obtain available financial incentives. Especially as utilities navigate new incentive programs, diligence and follow-up help to push the project forward.
- ▶ Be sure to collaborate directly with zoning and permitting officials to ensure compliance with all local mandates and safety requirements.



*Schematic of the solar array.
Photo credit: The Tower Companies.*