

A bright future beckons for hospital solar projects

Hospital on U.S. East Coast is continuing its sustainability journey with a ground-mounted solar installation.



MWh generated annually



of energy needs offset with solar



kW solar PV system



Overview

Healthcare facilities have numerous mission-critical requirements, but none is more important than power. A busy center city hospital with over 60 locations across the U.S. Eastern Seaboard is now demonstrating that sustainability initiatives do not need to come at the expense of essentials such as a reliable electricity supply.

Having already successfully set up one solar project, the hospital wanted to continue along the path of buying cleaner, greener energy at all their facilities, and ensure savings and cost predictability in the process. The solar sector has historically suffered from unreliable operators and concerns around over-promising and under-delivering, so the hospital was looking for a firmly established supplier with the ability to offer guarantees on production.

Solution

A Centrica Business Solutions solar power specialist spoke to the hospital about their goals and to identify possible solutions and sites. The hospital was not comfortable with a roof-mounted solar installation, and while other operators would have considered the site unsuitable for the type of installation proposed, Centrica Business Solutions designed, developed, and delivered a highly viable ground-mounted system. To maximize value, Centrica Business Solutions chose one of the hospital's medical center locations in a state that offered attractive incentives for solar projects, to act as a pilot for other patient care centers.

Technical overview

At this medical center, the hospital now runs a 370 kW direct current (DC) solar generation system that produces around 490,000 kWh annually. This represents around 90% of the medical center's total power consumption and is being used as a proof-of-concept for some of the hospital's other sites where similar systems can be installed.

Customer results

The medical center now has a source of power that is offsetting around 90% of the power they use and is providing a predictable cost of energy for the next 20 years. Significant benefits on the center's energy bills are expected almost immediately, even though the site's northern location means winter days are shorter and provide less sunlight. The majority of production is expected in the warmer, brighter second and third quarters of the year.

The system's success paves the way for similar projects at other hospital sites where space is available. At sites where solar isn't an option, primarily in urban centers where space is at a premium, other initiatives such as upgraded lighting, energy-efficient chillers, and other measures will be implemented.



490K
kWh generated
annually



90%
of electricity needs
powered by solar



20yr
electricity cost
predictability



383K+
pounds of coal
offset annually

“They’ll know the Centrica Business Solutions system is working pretty much from day one, and they’ll be able to monitor it to see what the system’s daily production looks like. The hospital is going to start seeing the benefits almost immediately.”

Anonymous