LG SOLAR COMMERCIAL CASE STUDY

Solar Powers the Pros

EL SEGUNDO, CALIFORNIA
CRITERIA
The solar panels needed to be highly efficient, cost-effective, reliable and durable. They needed to generate the 13 percent renewable energy to earn the maximum number of LEED points. Also important to the Lakers was making the right decisions – the right choice to improve the environment, to cut energy costs and to reduce their carbon footprint. The Lakers also did not want any roof penetrations on either the building or the carport, and had very limited space available to install panel arrays.

CHALLENGE
When an NBA powerhouse like the Los Angeles Lakers decided to build an entirely new facility to house all training and operations for both the Lakers and their minor league affiliate, the South Bay Lakers, there was no question the resulting training center would be a state-of-the-art powerhouse to match.

The Los Angeles Lakers embarked upon the construction of the 120,000-square foot UCLA Health Training Center with the intention of building a best-in-class temple of training, strength and conditioning, nutrition and injury prevention and treatment for the players of the celebrated dynasty that would also meet LEED Gold Certification. Given the arduous process requiring significant time and financial commitment, many clients decide not to pursue this certification but the Lakers persevered with the help of Southern California installer Vaha Energy. Also a challenge, the building has limited roof space so they required solar panels with high efficiency in order to achieve the required LEED points.
SOLUTION
A number of solar module manufacturers were considered, and in the end Vaha Energy recommend LG’s premium NeON® 2 375-watt solar panel. It was the ideal solution to both meet stringent requirements for LEED certification as well as significantly reduce operating costs. The LG panels were smaller than competitive models without sacrificing efficiency, it was the perfect panel to utilize in four arrays – three on the roof proper and one on the carport.

Vaha Energy CEO Geoff Tomlinson states, “With limited roof space, we had to get a little creative. LG was great to work with because they have some of the highest efficiency modules on the market.” The quality and name recognition associated with the LG brand, an international and diversified company, was also an important factor in LG being the ultimate choice; Geoff continues, “One of the reasons we’ve been successful is we pair with the best. We like quality partners in whatever we do, and LG and the Lakers both represent that. LG isn’t just a module manufacturer; it’s definitely a company that cares about what they’re doing, their products and reputation.”

To address the Lakers’ wish to not penetrate the roofs on either structure, Vaha Energy chose U-anchors for the carport installation, a technology that bonds to the roofing material through heat application and attaches to the racking footings. This approach differs significantly from the standard penetrated installations and provides a leak-proof and aesthetically appealing installation method as the array has a lower profile than normal. The final layout includes three arrays on the roof proper and an additional array on the roof of the carport.

The solar panels will provide DC power (direct current) generated from sunlight, which is then converted to AC power by the inverters for use at the facility. Any excess generation is fed back into the electrical grid, which provides the Lakers with electricity credit. The system is monitored remotely, which provides constant feedback on power generation, as well as alerts if there are any issues with the system’s operation. This allows the Lakers to optimize the systems performance and maximize their investment.
RESULTS
The installation, completed in April 2018, is expected to save the Lakers an estimated $38,000 per year, and it is expected to offset 12.6 million pounds of carbon dioxide, which is equivalent to carbon sequestered by 6,745 acres of forest in one year, according to Tomlinson. The project will pay for itself in about four years, thanks in part to Federal Tax Credits for renewable energy projects. The best part? The system’s total offset is approximately 16 percent of the facility’s energy needs, helping the project earn LEED Platinum Certification.

Joseph McCormack, the Lakers Chief Financial Officer & Senior Vice President of Finance, says, “We are thrilled with the addition of our new LG Solar panels. Vaha Energy identified the LG Solar panels as the perfect match for our new facility, and we are very pleased with the results. One of our goals as an organization is to be at the forefront of energy efficiency, and these panels further our commitment to sustainability.”

“We are thrilled with the addition of our new LG Solar panels. Vaha Energy identified the LG Solar panels as the perfect match for our new facility, and we are very pleased with the results. One of our goals as an organization is to be at the forefront of energy efficiency, and these panels further our commitment to sustainability.”

JOSEPH MCCORMACK, THE LAKERS CHIEF FINANCIAL OFFICER AND SENIOR VICE PRESIDENT OF FINANCE