

LOS ANGELES CONVENTION CENTER

SolarStrap™
Patented



SolarStrap by PermaCity delivers world's largest solar powered public convention center and Los Angeles to #1 Solar City in America

“ We are proud to lead American cities in the movement to meet the goals of the Paris Climate Agreement. ”

- Eric Garcetti
Los Angeles Mayor

“ One of the challenging aspects of our project involved planning and designing the installation of the roof top solar array in a manner that did not disrupt the numerous events we host in the exhibit halls below. PermaCity's design solution and execution of the project was terrific; allowing us full continuity of business without a hitch. ”

- Thomas Fields
Los Angeles Department
of Convention and Tourism
Development
Chief Operating Officer

TECHNOLOGY & PLAN

The City of Los Angeles bid out solar for the Los Angeles Convention Center, but high costs associated with public works and fragile roofs were an issue. PermaCity won the bid on the 2nd and final 3rd time and SolarStrap technology proved itself as a zero ballast zero penetration system. Any other technology would not work on the Convention Center's three feet of foam directly covered with Sika PVC membrane with little spare dead load capacity. The Convention Center roof was formerly damaged by a prior mini tornado, so the City wanted a very high safety factor. SolarStrap achieved a 5x safety factor with a direct bolt to bracket fail-safe system.

PERFORMANCE, ENVIRONMENT AND JOBS

The South Hall roof of the Los Angeles Convention Center provides 2.21 megawatts bringing the total to 2.58 megawatts and enough to power 874 Los Angeles homes, or 1,100 electric cars. The 30 year 106 million kWhs or electricity will curb 100,000 tons of carbon emission and directly benefitting downtown Los Angeles grid stability due to the planned gas fired electric facility closures in the coming years fulfilling the City's commitment to 100 percent renewable energy. 85 direct prevailing wage jobs were created, continuing PermaCity's veteran work programs and local labor commitments.

FINANCIAL RETURN

PermaCity believes this is the start of Cities realizing financial gains and policy objectives from the carbon-free economy. This project was City funded with a less than eight-year payback compared to a 30-year design life. PermaCity offers Cities and School Districts new roofs and guaranteed solar savings from its dedicated solar Capital Fund.

CARBON NEUTRALITY PROSPERITY

PermaCity leads with a prime example of how to take a large fragile roof and become a powerful energy generator and climate change leader for Los Angeles. This took the collaboration of the City and the roof manufacture to overcome prior obstacles. Now that this project leads other public facilities, once again a large spark in the trend of mandatory carbon change, all made possible with SolarStrap!

PROJECT INFORMATION

Location	Los Angeles, CA
System Size	2.2 MWs
Technology	SolarStrap™ (Zero Ballast and Zero Penetration System on 36 inch foam and membrane roof)
Transaction Type	Net Energy Metering City Funded
Commercial Operation Date	April 4, 2018