

Renewables in Practice

Federal Renewable Initiatives CASE REPORTS

LIHTC Program Advances Whole Project Solar Systems Without Added Subsidies

EAH Housing



California

ACTIVITY TYPE *Solar Photovoltaic*

PROJECT DETAILS *REHABILITATION*

System: Common areas and tenant units
Coverage: - 26 buildings
- 378 units (master metered)

Size/Rating: 900kW; 4,285 panels

On Site Generation: 1,220,832 kWh; 60-80% of community electric demands

Cost Savings: \$154,000 per year

Completion Date: September, 2009

SOLAR PROVIDER Sun Light & Power

GREEN BENEFITS

1,464,998 lbs. CO₂E
reduction per year
over system life

FINANCIAL DETAILS

Cost: \$ 8 million

Project Financing: - City of Richmond Taxable Bonds
- 4% LIHTC

Leveraged Sources: - CA MASH Rebates
- HUD Residual Receipts
- Energy savings leveraged
\$3 million in additional financing

EAH Housing is a national leader in green building and has made an institutional commitment to apply sustainable practices throughout its portfolio of more than 9,800 unit leases at 111 properties in 50 municipalities in California and Hawaii. This vision includes strategies to decrease greenhouse gas emissions and reduce the ecological footprints of its communities through investments in renewable energy systems, where such investments are financially feasible and generate operating benefits for the affordable housing asset.

The installation at Crescent Park, an affordable housing complex in Richmond, California, demonstrates the scope of EAH's commitment to renewable energy – at the time of construction, the 900kW photovoltaic system was the largest solar system installed on a multifamily affordable housing project in the nation.

The renewable investments at Crescent Park were undertaken in conjunction with the acquisition and rehabilitation of the property by EAH. This is an ideal time to incorporate renewable investments in the project's capital plan because a variety of funding resources are in play and, in many states preferences or added resources can be secured for energy investments. Through LIHTC, federal renewable investment tax credits and additional financing through the California Solar Initiative program, EAH was able to include an ambitious solar retrofit plans for the property.

Importantly, the energy saving provided from the renewable project provided a significant financial source of leverage for the project. The system was designed to offset 60 to 80 percent of the electric usage at the property in any given year amounting to \$154,000 for the first year of operation. This added cash flow to the property enabled EAH to secure \$3 million of additional financing; over 35 percent of the system cost.

A challenge for this project involved the installation of the system over a variety of roof styles within the property. Half of the buildings at the property have crescent-shaped buildings with sloped roofs, making it difficult to place the panel systems efficiently on those buildings. As a result, each crescent-shaped building had a unique solar panel layout.

The Crescent Park installation also supported important community policies and objectives by helping the City of Richmond meet its clean energy goal to derive five megawatts of power from solar energy.

Perhaps the most important lesson from EAH's experience at Crescent Park is that affordable housing providers are able to complete solar installations serving both common areas and tenant units without any new subsidy when incorporated with LIHTC transactions and where operational savings from the renewable system can be monetized to secure financing for renewable systems.

ADDITIONAL INFORMATION: www.eahhousing.org
