



OUR MULTIFAMILY WORK IN ACTION:

Triangle Court, Richmond, CA

Overview

GRID Alternatives partnered with the Richmond Housing Authority to install 98 solar PV systems, totalling 201kW, on the Triangle Court Apartments in Richmond, California. The development, located in one of the state's most environmentally impacted communities, serves families earning 50 percent or less of the Area Median Income. The project was funded by California's Low-Income Weatherization Program (LIWP) for large multifamily properties, and built on an extensive energy efficiency retrofit. The systems were installed between October, 2016 and April, 2017 with local job trainees and community volunteers. They are expected to produce \$1.88 million worth of energy and prevent 3800 tons of greenhouse gas emissions over their 25-year lifespan.

Partnership

In 2016, state funding became available for energy efficiency and solar on multifamily affordable housing through LIWP, and GRID partnered with program administrator Association for Energy Affordability (AEA) to implement the solar projects. GRID Alternatives and the City of Richmond, which have partnered since 2011 to bring solar power and job training to city residents through GRID's single-family solar program, worked

together to qualify the Triangle Court Apartments. GRID provided full technical analysis, design and installation services, and worked with the property management company to engage tenants.

Financing

The Triangle Court solar project was funded in full by the Low-Income Weatherization Program. LIWP receives funding for solar from California Climate Investments, a statewide program that puts cap-and-trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment. LIWP's multifamily solar program covers 50-100 percent of costs for qualifying affordable housing developments that also implement energy efficiency improvements. Triangle Court met the 100 percent threshold after an energy efficiency retrofit with AEA that reduced energy use by 15 percent. The retrofit was funded by HUD's Rental Assistance Demonstration program, federal tax credits, and rebates from Marin Clean Energy.



Community Impact

The Triangle Court Apartments serve some of Richmond's most economically disadvantaged families. The challenge of the solar project was to ensure maximum financial benefits for residents. In typical HUD-sponsored affordable housing, tenants pay a fixed 30 percent of their income on housing, including utilities, so that when energy costs go down, rent goes up. For this project, the Richmond Housing Authority effectively froze the tenants' rent costs so that the reduction in electricity costs from solar would result in actual savings, rather than an increase in rent costs to regain a 30 percent ratio. The individually metered systems, ranging in size from 1.7 to 2.7 kW, will reduce electricity bills by an average of 87 percent for each household, for a combined annual savings of \$75,000. There is no cost to the tenants for installation or maintenance.

Workforce Development

GRID Alternatives led the installation using our unique volunteer and workforce development model, which provided opportunities for local volunteers and job trainees to participate in the installation, gaining hands-on experience they can use to get jobs in the growing local solar industry. Sixty-one job trainees received nearly 900 hours of training through the project, including students of local job training organizations Rising Sun Energy Center and Solar Richmond. The project also hosted GRID's week-long women's intensive solar training program.



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GRID Alternatives is a nonprofit organization whose mission is to make renewable energy technology and training available to underserved communities. Our vision is a successful transition to clean, renewable energy that includes everyone.

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