

U.S. Military Major Solar Projects

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The U.S. Department of Defense plans to meet 25% of its energy needs with renewable energy by 2025, aiming to cover the cost of energy efficiency projects through financial instruments such as Power Purchase Agreements, Enhanced Use Leasing, Utility Service Contracts and Energy Savings Performance Contracts. Solar Mosaic blog published a list of several major solar projects that will help DoD to meet its energy efficiency goal. The first project is the Fort Irwin solar plant which will initially produce more than 500 MW, with the potential to deliver 1000 MW. The project, awarded to Clark Energy Group and Acciona, is being funded through an enhanced use lease under which the two companies finance, construct, and operate the solar project in exchange for a long-term lease of U.S. Army land. The second project is SolarCity's five-year program called SolarStrong which aims to provide solar power to up to 120,000 privatized military housing units while creating up to 300 MW of solar generation capacity, "making it the largest residential solar photovoltaic project in American history." The next project is the Nellis Solar Power Plants - the single largest solar photovoltaic system in the U.S. which includes 70,000 solar panels, generates 14.2 MW, and saves the U.S. Air Force \$1 million annually. The U.S. Air Force did not incur any upfront costs, with the project being financed through the SunPower power purchase agreement (PPA) under which Nellis purchases power at a guaranteed rate for the next 20 years. SunPower also installed a 13.8 MW solar photovoltaic power system at Naval Air Weapons Station China Lake in California. The system is expected to reduce 30% of Station's energy usage and cut electricity costs by approximately \$13 million over the next 20 years. Similarly to the other projects, the U.S. Navy purchases the power through a PPA with no upfront costs. [Read more](#) about these and other solar projects from Solar Mosaic Blog.