

SunDrum™ Solar and AllNuEnergy Install the Largest PVT system in the US.

Hudson, Massachusetts- March 26th, 2013

SunDrum® Solar LLC, a manufacturer of hybrid PVT systems (Combined Photovoltaic and Thermal solutions) and AllNuEnergy Inc., an installer of both thermal and PV solutions, recently completed the largest on-roof commercial PVT system in the United States. The system is located on the roof of the Inn at Schofield Barracks, in Oahu, Hawaii. The specially designed hybrid system is composed of 700 PV panels and 282 SunDrum Solar collectors.

The SunDrum thermal collectors are a unique design in that they take advantage of the excess heat generated by solar irradiance found on PV panels. PV panels currently convert 5-20% of the Sun's energy into electricity. The remainder is absorbed as heat waste energy. By attaching the SunDrum collector to the underside of the PV panel, the SunDrum system is able to capture up to 75% of the sun's energy by maximizing electrical production, and capturing previously waste heat. The heated water is used to power the Inn's domestic hot water system.

The exclusive design of the SunDrum Solution thermal panel allows the greatest amount of renewable energy to be generated in the given amount of space. Further, by drawing heat directly from the PV panel, the SunDrum collector is able to cool it, thereby improving the electrical output by 5-10%.

The PV panels are rated at 285Wp each, for a total of 199kW-DC-STC. The SunDrum thermal collectors are rated at 650Wp (BTU equivalent) each, for a total of 183kW.

Considering the reduction in energy usage and all Federal and State incentives, the payback on the entire system is expected occur in less than 3 years and also have a return on the investment in excess of 30%.

Installation of this hybrid system took just under seven weeks. When asked about this project, Bryan Coldren, majority owner of AllNuEnergy had this to share, "This is the first time we have worked with the SunDrum System. It was ideal for this project as we needed to maximize the electrical content of the design, as well as provide an efficient thermal solution. The SunDrum System gave us that ability." AllNuEnergy Inc. is an installer of both PV and thermal systems. They have completed installations throughout the United States including multiple residential and commercial designs/installations. The company is based in Colorado and has been operating since 2009.

SunDrum® Solar, LLC, designs, develops and sells hybrid solar energy collectors for residential and commercial markets. The SunDrum thermal collector is compatible with most major PV panels on the market today. The company, based in Hudson, Mass., has been selling the SunDrum system since 2008.