



Subject: SunDrum® Solar Hybrid PVT System delivers record peak 86% of sun's energy to Massachusetts home.

SunDrum Solar LLC has achieved a solar industry one hour peak delivery record of 86% for a hybrid solar system, which generates both photovoltaic and thermal (PVT) solar energy. This record was achieved on April 24, 2013. This record breaking performance was enabled by the combination of a high performance standard Photovoltaic (PV) panel and the unique SDM 100 thermal collector from SunDrum Solar.

After adjustment for all system losses, a record of 86% was used by the home during the peak hour of 2-3PM when 870W of thermal energy and 200W of electrical energy was delivered by each solar panel fitted with the SunDrum Solar Collector. This performance sets a new record for a fixed, non tracking, hybrid array.

Traditionally, solar system designs convert the sun's energy into either electricity with a PV panel or to heat water with a solar thermal collector. The most efficient stand alone PV systems can convert up to 19% of the sun's energy into electricity. The majority of the sun's energy hitting the PV panel escapes as waste heat. Standard solar thermal systems are more efficient than PV panels, converting up to 60% of the sun's energy but are limited to heating water.

The SunDrum SDM100 thermal collector is a unique thin, flat, lightweight design which attaches to the underside of a standard PV panel to create a hybrid module. The SunDrum collector heats water by absorbing the PV panel's excess heat, generating both electrical and thermal energy in the same footprint. Further, it cools the PV panel, improving its efficiency 5-10%. The collector can be retrofitted beneath existing PV systems or on new installations.

This efficiency record is one of several recent achievements for SunDrum Solar which recently completed the largest on-roof commercial PVT system in the United States on the Inn at Schofield Barracks, in Oahu, Hawaii.

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.