



An Investment with Real Returns

CASE STUDY - Walkill Correctional Facility Walkill, NY 2009

PROJECT SUMMARY

- Domestic hot water
- On-demand solar exchanger- no storage tank
- Estimated solar fraction ~20%
- System cost- \$320,000
- Annual BTU production 766 mmBTU

“Project Sunshine” is a pilot demonstration of solar technology jointly developed by the New York State Office of General Services (OGS), the Department of Correctional Services and the New York Power Authority. SunMaxx Solar was chosen as the developer and designer for the first installation site at Walkill Correctional Facility, a 608-bed medium security men’s prison located near New Paltz, NY. The system was designed to improve energy efficiency and meet the hot water needs of the entire facility.

Located on the perimeter of the 48-acre site are 48 SunMaxx ThermoPower-VHP30 solar thermal collectors (totaling 1,440 vacuum heat pipes), which circulate a glycol/water solution through a closed-loop system to preheat vast amounts of water used for showers, laundry and kitchen facilities. Daily power output averages 1.6 mmBTU per day. The size of the system makes it one of the largest installations in New York state. The facility is expected to see a reduction in its current annual oil consumption by 160,000 gallons. Over 60 New York state prisons are set to follow, leading to a reduction of millions of tons of carbon emissions and millions of dollars from the state’s energy budget.

In 2010, the system won Best In State for 2010 government solar projects

