



System Size	Estimated Annual Production	Installation Date	Synchronization Date
50 kW	59,900 kWh	2006	January 2007

Modules	Inverters	Panel Orientation	Panel Pitch
252 Sharp	6 - Xantrex/1 -Aqua Max	South	5°

Project Description

In 2005 the Environmental Protection Agency (EPA) Office of Science and Technology awarded the International Center for Water Technology (ICWT) a \$1.4 million grant. The grant included funding to construct the solar-powered Water Energy Technology (WET) Lab to provide a test facility where technical training and pump testing could be made available to the public.

The solar array was installed on the roof of the WET Lab in December of 2006 and produces 50 kWh at peak. The system provides energy to the entire building including powering a 50 hp motor pump used for testing. The system can run independent of the grid and is net metered. When power is not required for testing, the excess feeds back into the university grid and they are credited by the power company.

Major Challenges/Solutions

Construction of the building got caught up in the local housing boom and post-Hurricane Katrina clean up/reconstruction efforts. With rising costs and limited funding, ICWT and the Central Valley Business Incubator (CVBI) partnered to construct the WET Incubator that now houses elements of both organizations.

Financial Benefits

Total Cost	\$478,800 (2006)
PG&E Rebate	\$244/kW (2006)
Financed	\$324,123
CA Tax Credit	\$154,677 (2006)

Environmental Enhancements over 25-year project life (CEC solar estimate worksheet)

CO2 reduction:	72,104 lbs
SO2 reduction:	1.35 lbs
NO reduction:	100.48lbs

Quote

“The WET Lab is the first green building to be built on the Fresno State Campus. Not only has it been a great investment for us as a research facility, it has been an excellent showcase for the community on how a solar-powered industrial building can be economical and environmentally responsible.”

*Dr. David Zoldoske
ICWT Director*