



SOLAR CASE STUDY

Hardesty (Midtown Multi-Service Center)



PROJECT DESCRIPTION:

- Multipurpose building located in south central Tucson serving police and water departments.
- Solar panels offset part of electric load.
- Building also features water harvesting and daylighting.
- Additional roof supports built to support PV panels.

TECHNICAL SPECIFICATIONS:

- Operational December 2003.
- 48 BP 140 solar panels
- generating 6.7 kW DC, 5.4 kW AC.
- Xantrex PV 10208 inverter.
- Estimated annual energy production-10,000 kWh.
- Annual cost savings approximately \$800.00.
- Greenhouse gas reduction approximately 9.6 metric tons CO₂ annually.

FINANCIAL DETAILS:

- System cost including design and construction - \$55,546.
- \$10,000 rebate from TEP.
- Life cycle cost of energy \$.031/kWh.

