



SOLAR CASE STUDY

Clements Fitness Center Photovoltaic Project



PROJECT DESCRIPTION

- Multipurpose building located on Tucson's east side.
- Combines daylighting and energy efficiency with solar electricity generation.
- Solar panels shade windows of weight/cardio room and generate electricity.

FINANCIAL DETAILS

- Panels, racks and inverters donated by TEP through SunShare program (estimated value \$20,000).
- City paid \$20,000 for design and installation from Solar Energy Investment Program.
- Total costs-\$20,000.

TECHNICAL SPECIFICATIONS

- Operational March 2005.
- 120 BP MST-50 solar panels generating 6 kW DC, 4 kW AC.
- Two Xantrex ST-2500XR 48 VDC inverters.
- Estimated annual energy production-9500 kWh.
- Annual cost savings approximately \$760.
- Greenhouse gas reductions approximately 9.1 equivalent tons CO₂ annually.
- TEP responsible for all maintenance through 2012.

