



THE HISTORIC Y is a center for the arts, education, human rights and social and environmental justice, providing a powerful force in the Tucson community for promoting human and environmental justice, individual enrichment, creative self-expression, environmental sustainability, and respect for nature and diversity.

PERFORMANCE: As the result of many improvements, the 1930 Historic Y exceeds the *2030 Challenge for Planning* energy reduction goal of 50% with a

66% energy reduction

The Historic Y – Tucson 2030 District PARTNER

RETROFIT PROJECT CASE STUDY

PROJECT BACKGROUND:

The main building at The Historic Y was designed by Annie Graham Rockfellow to house the YWCA of Tucson and completed in 1930. Expanded in the 40's and 50's, the entire complex was updated and converted to offices in the 1980's, with care to preserve the original architectural features that lend the building its wonderful charm and character.

The Historic Y has already proven itself to be a leader in both environmental and social justice causes, and in leading the way to dramatically greater energy efficiency. Careful management has resulted in excellent maintenance practices for all energy equipment, a careful plan for capital upgrades including systematic replacement of lighting, the introduction of heat pumps, sealing of the decades-old ducting system and extensive insulation of parts of the complex.

BUILDING STATISTICS

Owner: Shawn Burke
Property Manager Emeritus: Joey Schwanz
Property Manager: Clayton Clark
Building Type: Community organization offices, conference space and a performing arts theater
Location: 738 N. 5th Ave. & 300 E. University Blvd.
Square Feet: 43,000

ENVIRONMENTAL SAVINGS

Water: 62,597 gal /yr
CO2: 278,806 lbs /yr
Coal: 118,512 lbs /yr
Miles Not Driven: 300,253 /yr

ENERGY (before solar system installation)

EUI (Energy Use Intensity): 26 kBtu/sf/yr
ENERGY STAR Baseline EUI: 75 kBtu/sf/yr
2030 Challenge Goal: 38 kBtu/sf/yr
Reduction from Baseline: **66%**
Energy Cost: \$ 44,884
Cost Savings from Baseline: **\$ 86,612**



INNOVATIVE MEASURES:

Careful management has resulted in excellent maintenance practices for all energy equipment, a careful plan for capital upgrades including systematic replacement of lighting, the introduction of heat pumps, sealing of the decades-old ducting system and extensive insulation of parts of the complex.

As the result of these and other improvements, the 1930 Historic Y exceeds the 50% reduction from national averages goal of the **2030 Challenge**. And they accomplished this without the new PV panels, which went into operation in February, 2017

The Historic Y
is now powered by the sun!



SOLAR SYSTEM

System Size: 65.21 kW
Annual Production: 118,512 kWh/year

The solar system now provides 60% of building electrical use, increasing annual \$\$ savings



T U C S O N
2030
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