



Project Highlight

Marana Unified School District, AZ



District-Wide Energy Transformation Boosts Efficiency While Optimizing Learning Environment

Technology Type:

Energy Efficiency | Central Plant Upgrades | LED Lighting | HVAC Upgrades | Solar PV | Building Automation & Controls | O&M | Energy Savings Performance Contract (ESPC) | Power Purchase Agreement (PPA)

Facility Size

1.9M sq. ft.

Energy Project Size

~\$23,494,000

Annual Solar Energy Generation

7,663,361 kWh

Annual Energy Cost Savings

~\$818,000



Summary

As one of the largest school districts in Arizona, Marana Unified School District (MUSD) selected Ameresco as an energy partner to promote fiscal responsibility, environmental stewardship, and student and staff well-being. Through a long-term partnership, Ameresco has implemented nine phases of work, comprised of three Energy Savings Performance Contract (ESPC) projects and six solar PV projects. MUSD is on its way to becoming one of the most energy efficient school districts in the country.



Solution

Ameresco's integrated energy approach began with Phases 1 through 3 that focused on implementing energy conservation measures and critical infrastructure upgrades. Phases 4 through 9 expanded the District's renewable energy portfolio with solar PV systems installed across 15 sites, including carports, playground canopies, basketball court canopies, and ground-mounted arrays. The comprehensive project scope included:



- Boiler, chiller, and water heater replacement
- Water system upgrades and replacement
- Cooling tower gearbox replacement
- Comprehensive lighting and lighting controls upgrades
- Direct digital controls (DDC) system implementation
- HVAC and motor replacement
- Multi-zone to variable air volume conversion and economizer retrofit
- Cooling tower variable frequency drive installation
- Building envelope improvements and additional infrastructure upgrades
- 4.066 MW solar PV

Partnering with Ameresco has been a game-changer for our district. Not only are we reducing our energy expenses significantly—savings that can be redirected into classrooms and student programs—but we're also taking real steps toward environmental sustainability. This initiative reflects our commitment to responsible budgeting and to preparing our students for a better future.

Thomas Bogart
Chief Financial Officer, MUSD



Benefits

The energy conservation and infrastructure upgrades across 19 Marana Schools provided essential facility improvements and deliver significant cost savings and operational benefits to the District including:

- Annual energy savings of ~5,013,686 kWh and water consumption savings of ~14,700 kGal
- Savings from energy projects with Qualified School Construction Bonds covered ESPC project costs
- Produced positive cash flow in utility and maintenance budgets allowing reinvestment in other priorities
- On-site solar provides over 97% of electrical needs of facilities
- Covered parking for staff and public at every school
- Designed to reduce carbon emissions by ~7,502 tons per year

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy infrastructure solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

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