

EPC for Facility Improvements: A Budget-Neutral Approach

NMSBA Annual Meeting Presentation Saturday, December 14, 2024



New Mexico Energy Services Coalition

The Energy Services Coalition is a public private partnership promoting the benefits of, providing education on, and serving as advocates for the widespread use of Guaranteed Energy Savings Performance Contracting (GESPC) by state and local governments.

Through the collaborative efforts and diverse knowledge of our public and private sector members, the ESC aims to make GESPC one of the primary means of increasing energy efficiency, modernizing infrastructure, enhancing resilience, and improving environmental quality.



Harold Trujillo – Public Co-chair NM EMNRD

Bureau Chief, Retired



Tara Trafton – Private Co-chair

Yearout Energy/ESG

Account Executive



Neal Skiver – Treasurer

LVL Finance

President



EPC for Facility Improvements

The Basics

What is Energy Performance Contracting?

The Investment Grade Audit

How can K-12 Districts Take Advantage?

K-12 Project Profiles

Activity



The Basics

The Basics are...

It goes by many names:

- Guaranteed Energy Savings Performance Contracting (GESPC)
- Energy Savings Performance Contracting (ESPC)
- Energy Performance Contracting (EPC)
- Guaranteed Utility Savings Contracting (GUSC)

It is:

- A **budget-neutral approach** to make building improvements that reduce energy and water use and increase operational efficiency.
- A design-build approach to infrastructure improvements with guaranteed outcomes.

The main benefit is to leverage savings to CLOSE FUNDING GAPS!

You can pay for today's upgrades with tomorrow's savings!

For every dollar spent on utility costs, a significant portion is wasted on inefficiencies...

The EPA Estimates that on average facilities use 30% more energy than what is necessary to properly operate the facilities











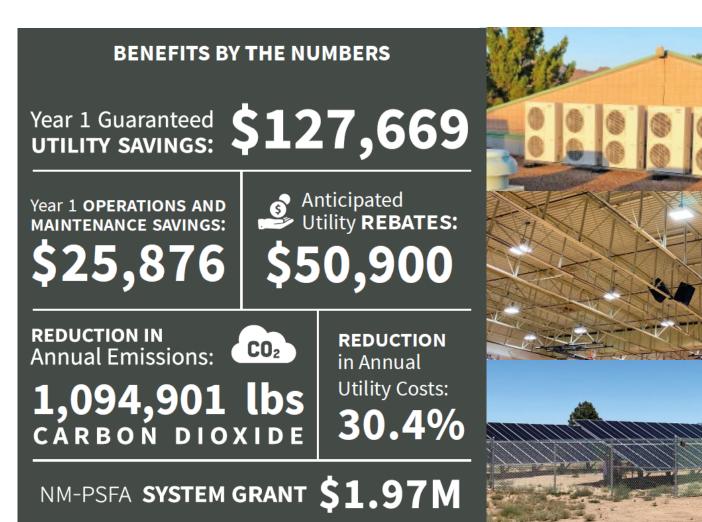
OVERPAYMENT

Socorro Consolidated Schools

• Contract Amount: \$7.3M

• **Gross Area:** 364,000 ft²

• FIMs Implemented: LED Lighting with Dimming and Daylight Harvesting, HVAC Equipment and Controls, Water Conservation, New Roofing, HE Low Voltage Transformers, Building Weatherization, Utility Billing Error Correction, Solar PV.





What is Energy Performance Contracting?

What is an Energy Performance Contract?

A construction project on a facility or campus that uses future energy savings to pay for up-front costs of the project - eliminating the need to dip into capital budgets or burden taxpayers or the legislature.

These qualified construction measures include:



Lighting upgrades



Solar installation



Heating, air conditioning, boilers upgrades



Water conservation



Electric Vehicles, chargers, and energy storage



Impact in New Mexico

Public Facilities have implemented over \$345 Million in Energy Projects that REPLACED old inefficient equipment and reduced their operating costs under the Public Facilities Energy Efficiency and Water Conservation Act.

- LED Lighting
- Efficient Boilers and Chillers
- Efficient Air Conditioners
- Solar Photovoltaic systems
- Microgrid Systems
- Battery energy storage
- EV Chargers













Process Overview



*List of qualified providers: https://www.emnrd.nm.gov/ecmd/espc/



Detailed Process

Select an Energy Service Company (ESCO)

- An ESCO is a General/Prime Contractor with a team of specialized engineers who perform energy and water audits.
- They determine costs and savings and guarantee project performance.

Audit the Facility

- The ESCO works with the customer to determine their most critical infrastructure needs.
- The ESCO and their partners work with the customer to perform specialized audits to identify opportunities for utility and operational savings.

Finance the Project

- •The audit performed by the ESCO is "Investment Grade" and this allows agencies to leverage the guaranteed savings.
- •Working with your FA, the ESCO provides project proforma for financing.

Implement ECMs

 The ESCO implements the co-developed project.

Verify Installations & Savings

- The ESCO provides postinstallation and annual reporting verifying savings targets are being met.
- If savings are not met, the ESCO must write a check to the customer for the missed savings.



Significant Benefits



Streamlined Procurement: Statewide Price Agreement



Scope of Work: Guaranteed Project Cost – No Change Orders



Savings: Guaranteed Energy & Water Savings



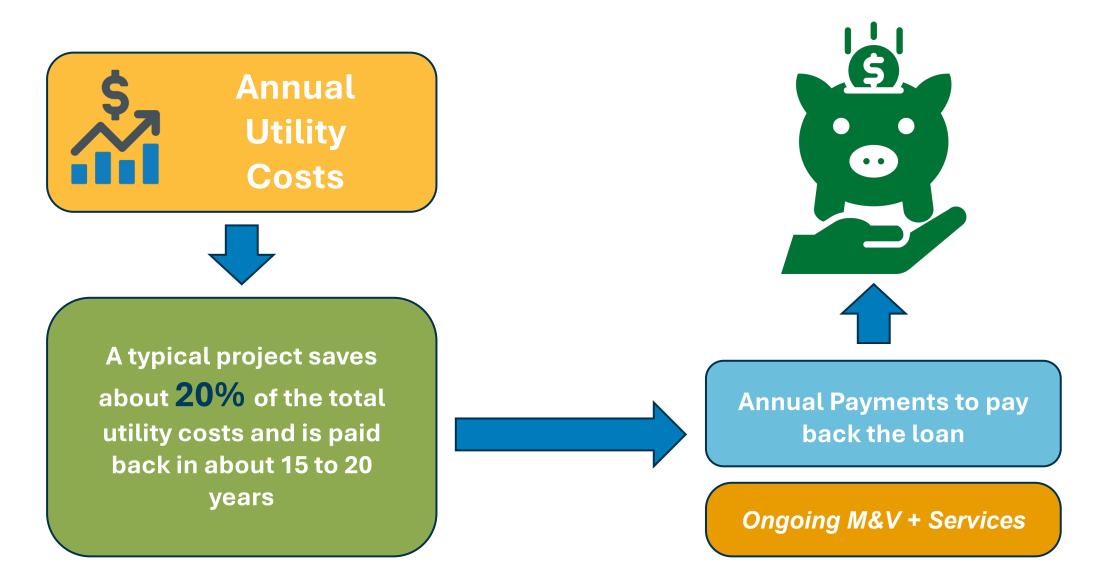
EMNRD Support: 3rd Party Reviewer



Term: Up to 25 years



Performance Contracting - Cash Flow Example



Energy Conservation and Management (ECAM) Division of EMNRD's Roles and Responsibilities

PROVIDE 3rd PARTY REVIEW SERVICES TO:



REVIEW INVESTMENT GRADE AUDIT



VERIFY ENERGY SAVINGS REPORT



MONITOR CONSTRUCTION



Assistance from the New Mexico Energy Conservation and Management (ECAM) Division of EMNRD

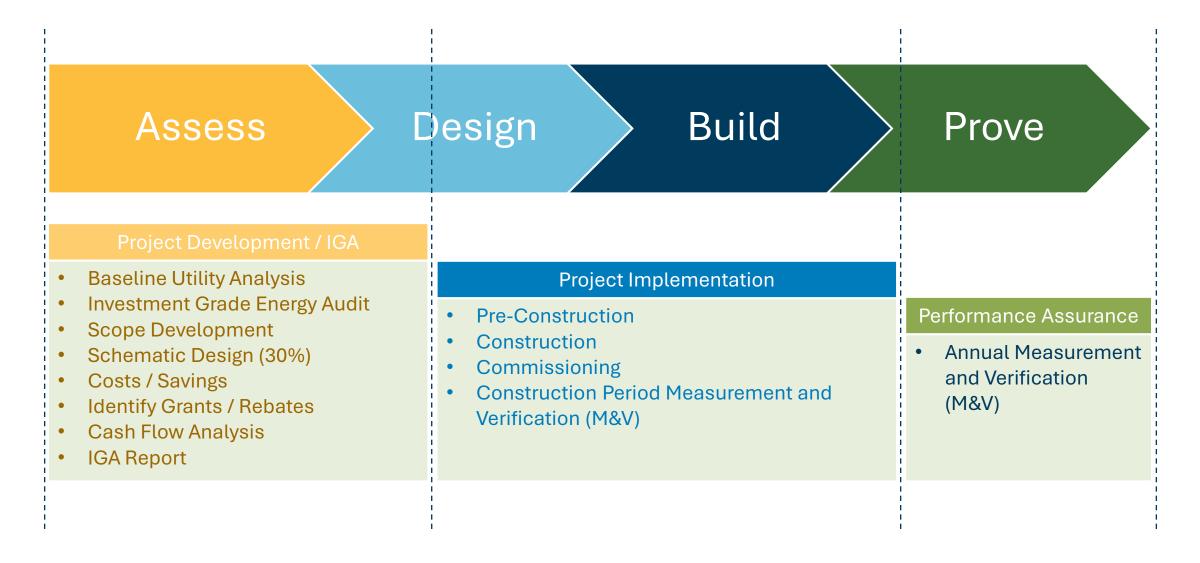
- ECAM has 4 consultants ready to assist you DIRECTLY with the process
 - Review the Investment Grade Audit for your School
 - Review construction progress
 - Verify energy saving provided in the Measurement and Verification Report
- Provide sample RFPs and Sample contract if you do not use the State Price Agreements
- ECAM will also reviews and certifies the Investment Grade Audit if the assumptions are reasonable, and the savings are accurately calculated.



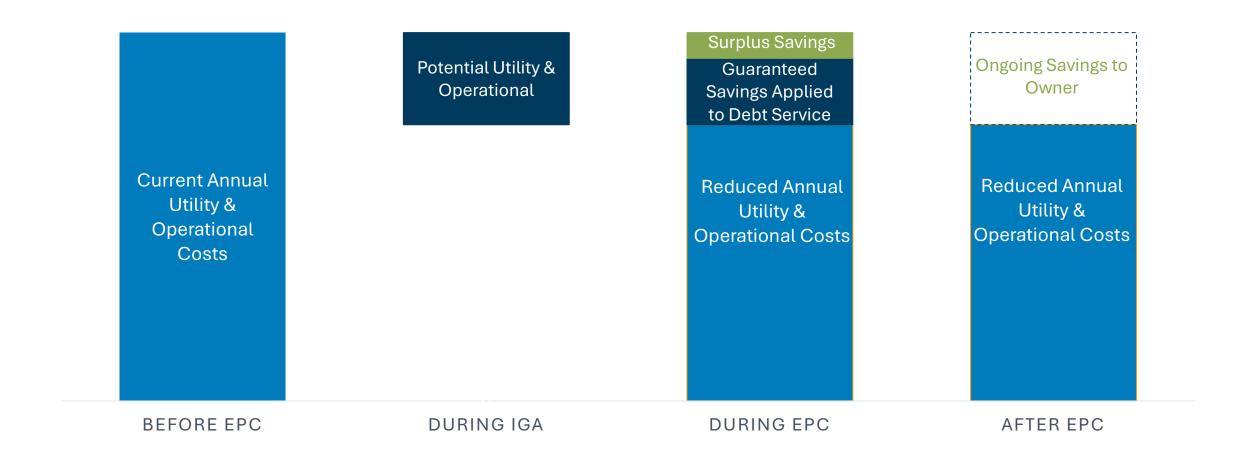


The Investment Grade Audit

EPC Process



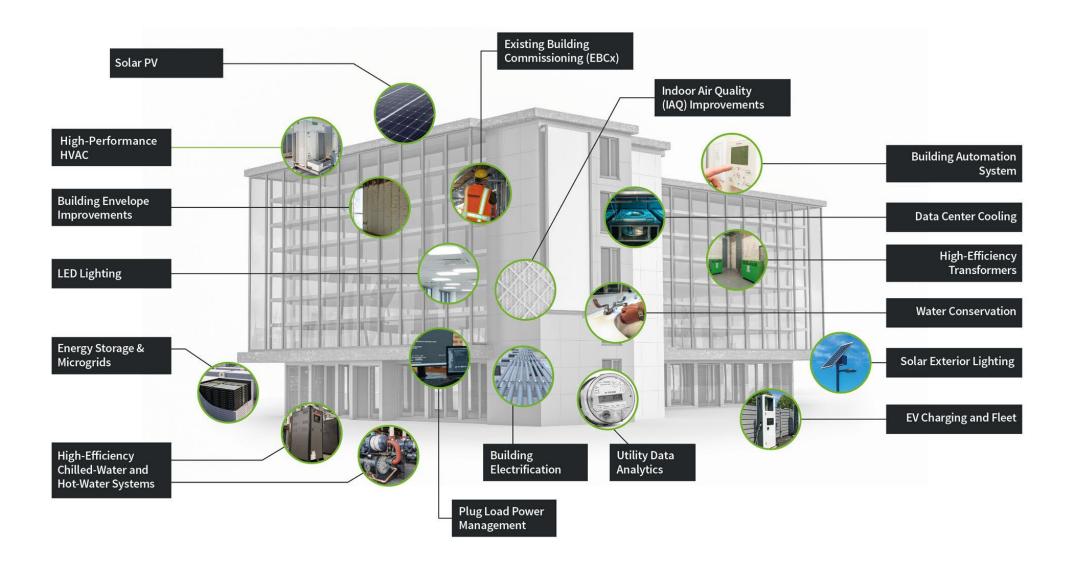
Energy Performance Contracting (EPC)

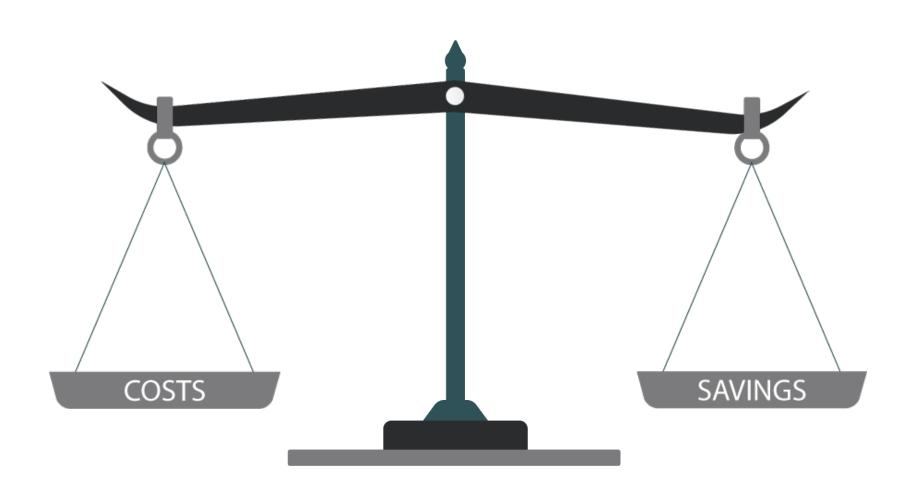


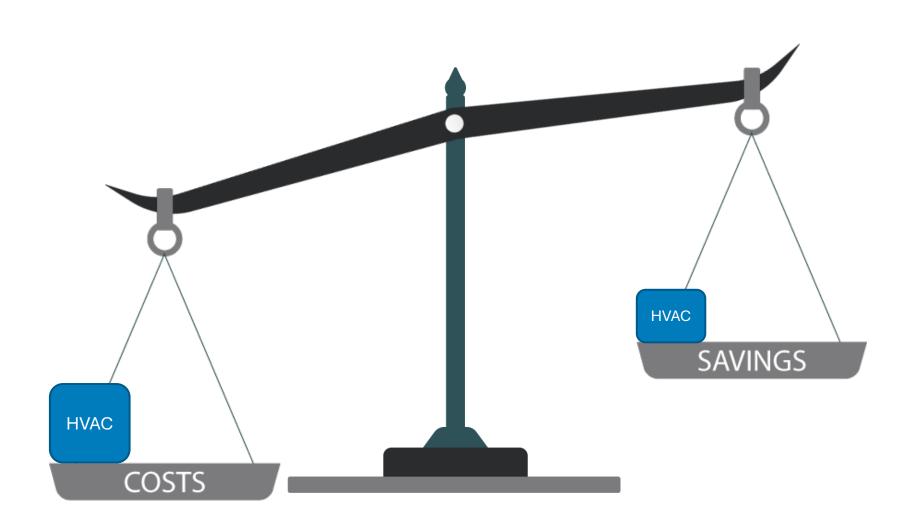
EPC: Facility Improvement Measures

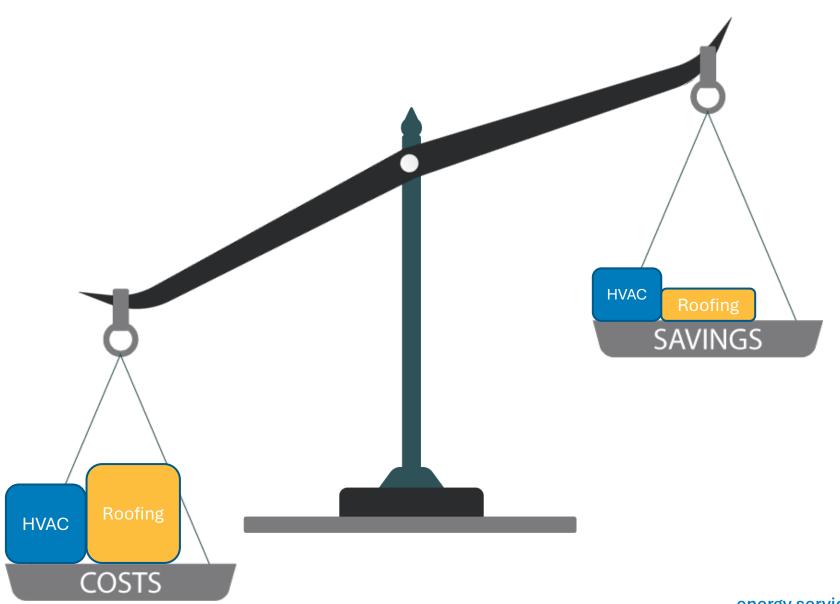


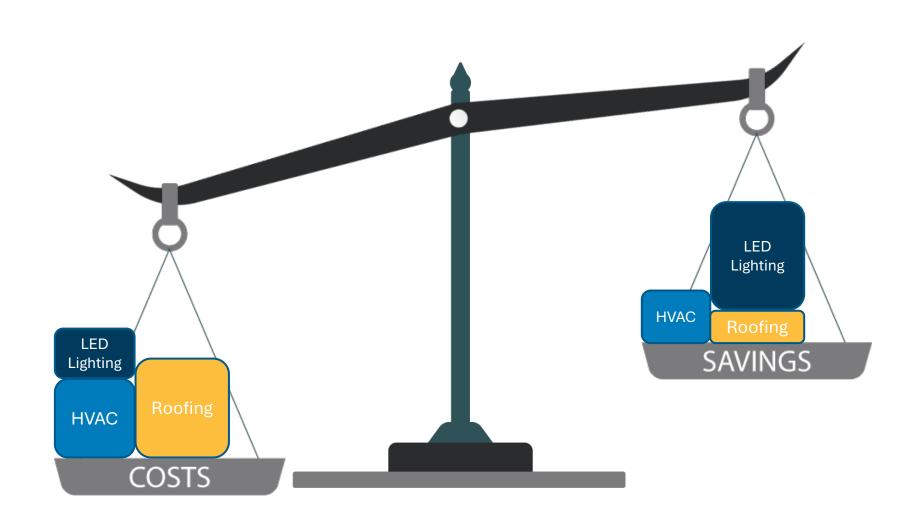
EPC: Typical Measures

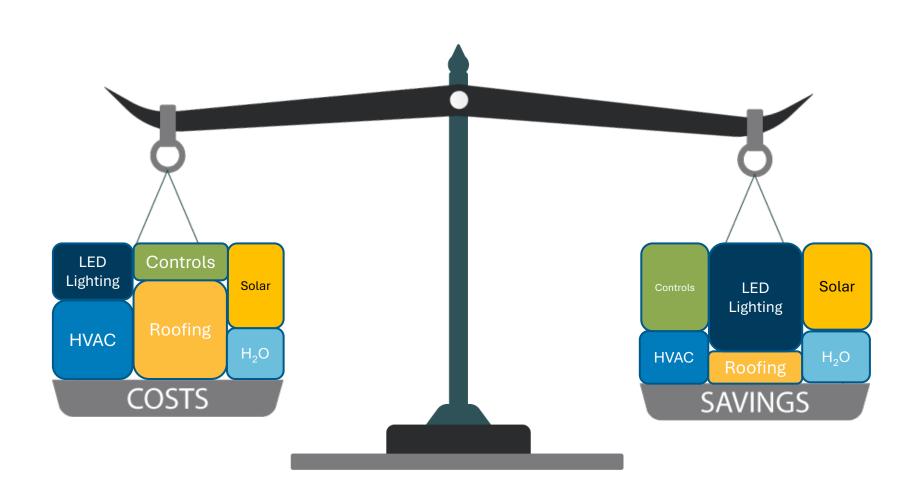












The IGA Fee

Set by the State and is based on audited gross area of facilities and location in NM.

| GSD Purchasing Zone | Facility Area (ft²) | | |
|-----------------------|---------------------|---------|---------|
| | < 25K | 25-100K | 100K + |
| Zone 5 | \$0.250 | \$0.225 | \$0.200 |
| Zones 2 and 8 | \$0.275 | \$0.250 | \$0.225 |
| Zones 4 and 6 | \$0.300 | \$0.275 | \$0.250 |
| Zones 1, 7, 9, and 12 | \$0.325 | \$0.300 | \$0.275 |
| Zones 3, 10, and 11 | \$0.350 | \$0.325 | \$0.300 |

COLFAX SAN JUAN TAOS UNION MORA HARDING McKINLEY SANDOVAL SAN MIGUEL SANTA QUAY BERNALILLO **GUADALUPE** CIBOLA VALENCIA TORRANCE CURRY DE BACA SOCORRO ROOSEVELT CATRON LINCOLN CHAVES SIERRA GRANT **OTERO** DONA ANA HIDALGO

List of qualified providers: https://www.emnrd.nm.gov/ecmd/espc/



How Can K-12 Schools Take Advantage?

EPC Act

Allows a Governmental Unit (school district, city, county, state agency, etc.) to enter into a Guaranteed Utility Savings Contract with a Qualified Provider (an energy services company, or "ESCO")

The Qualified Provider will install various energy and water conservation measures, such as lighting, HVAC, energy management systems, controls, insulation, replacement windows/doors, solar (electric and thermal), cogeneration, etc.

The Qualified Provider must provide a written guarantee that the energy savings will meet or exceed the costs.

The term of the Guaranteed Utility Savings Contract cannot exceed 25 years or the expected useful life of the most durable energy or water conservation measure

EPC Act continued

A Governmental Unit may enter into an installment payment contract or leasepurchase agreement for the purchase and installation of energy or water conservation measures

The payment obligation is only payable from utility cost savings, conservation-related cost savings and other revenues pledged for that purpose under the EPC Act (not a general obligation)

The only source of payment is the "Public School Utility Conservation Fund", which is annually approved for funding by the New Mexico Legislature.

Important Topics

Applicable EPC guidelines

- Finance term cannot exceed 25 years or life of the most durable measure
- NM-EMNRD recommends a minimum of 3-years Measurement and Verification (M&V)
- Annual Savings must be cash flow positive in every year

Dodd-Frank, circa 2011

- An ESCO is not a Municipal Financial Advisor (MFA)
- ESCO's can provide general cashflows, cost/savings, etc.
- Cannot solicit, recommend financial vehicles, etc.

Additional Funding Streams

Capital on hand

Available capital already planned for scopes of work included in project scope

Grants and IRA

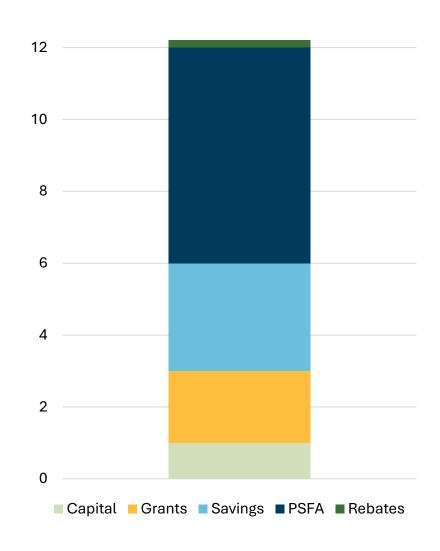
 Federal/State funding to support Solar, HVAC and other improvements

PSFA

Financed utility savings can be used as PSFA Match

Rebates

ESCO may identify utility rebates and support applications





Project Profiles

Texico Municipal Schools

Contract Amount: \$2.1M

Gross Area: 170,000 ft²

FIMs Implemented: LED Lighting, Window Replacements, HVAC Updates, Building Envelope Remediation, Retro-Commissioning, Electrical Upgrades

BENEFITS BY THE NUMBERS

Year 1 Guaranteed \$17,590 UTILITY SAVINGS: \$17,590

Year 1 OPERATIONS AND **MAINTENANCE SAVINGS:**



\$4,738 \$80,000

REDUCTION IN Annual Emissions:



332,881 lbs CARBON DIOXIDE **REDUCTION** in Annual Energy Consumption:



Dora Consolidated Schools

Contract Amount: \$2.8M

Gross Area: 110,000 ft²

FIMs Implemented: 200 Tons of HVAC Equipment, HVAC Controls, Roof Restoration, Building Weatherization, Supplemental Propane Tanks, Electrical Upgrades, Consolidation of School Zone Lighting.

OPERATIONAL \$26,300 SAVINGS:

Annual
OPERATIONS AND
MAINTENANCE
SAVINGS:

\$17,000

Annual
REDUCTION
in Annual
Energy Costs:

\$9,300

Addresses

TOP 3
FACILITY CONCERNS

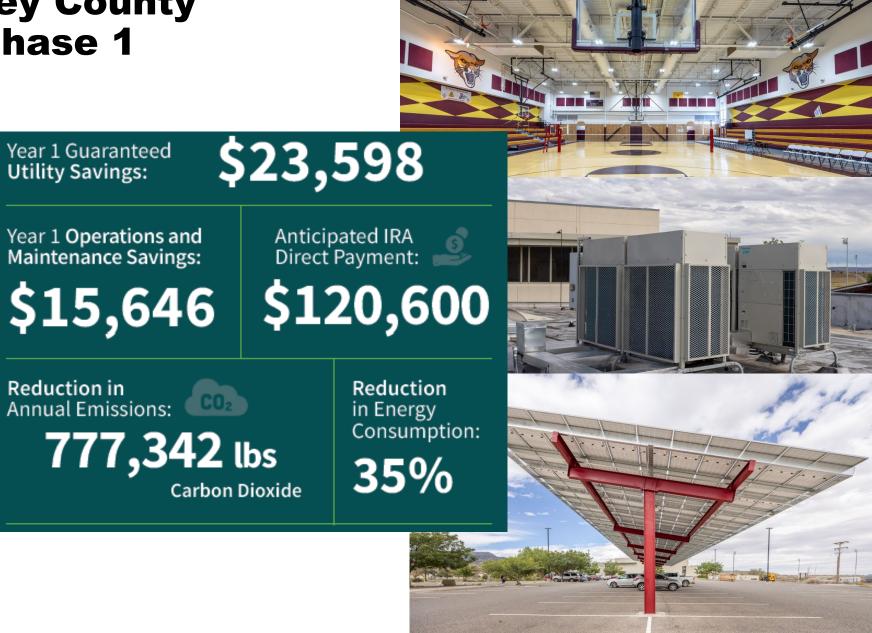


Gallup-McKinley County Schools – Phase 1

Contract Amount: \$35.0M

Gross Area: 310,000 ft²

FIMs Implemented: 800
Tons of High-Efficiency
HVAC equipment, LED
Lighting, High Efficiency
Low Voltage Transformers,
Electrical Upgrades,
Building Weatherization,
Solar PV Carport





Activity

Let's Build a Project Together!

Mad Lib

Project Worksheet



The school district is very happy to be one of the first in the State to commit to reducing our energy, water and operational costs through the services provided by Yearout Energy. The changes implemented will help to address the District's deferred maintenance needs while also improving the indoor learning environment for our students and staff. Furthermore, the cost savings more than justify these changes and will help us to focus on providing more programs for students.

Ron Hendrix

Socorro Consolidated School District Superintendent (previous)

