

PROJECT EXCEEDS GUARANTEED ENERGY SAVINGS IN FIRST THREE YEARS



In 2016, Bernalillo County's Metropolitan County Detention Center (MDC), the largest correctional facility in the state, was 14 years old. Keeping 500,000 square feet operational 24/7 had taken its toll on equipment and infrastructure. Widespread equipment failures were in progress or imminent, which strained maintenance staff and put its 2,220 inmates at risk. Yet, the county didn't have the budget to replace all the aging units at once.

Recognizing that emergency renovations can cost significantly more than a planned project, and that reducing the facility's carbon footprint was a high priority, the county eyed Yearout Energy Services' Energy Performance Contracting (EPC) initiative.

Energy Performance Contracting (EPC)

Enables organizations to fully fund essential improvements solely through energy and operational savings.

Yearout Energy Awarded the Contract

After a one-year Investment Grade Audit (IGA) to identify the scope of the project and design a holistic and comprehensive solution that factored in long-term costs, Yearout Energy was awarded a \$13.9 million dollar contract. The goal: Provide energy efficiency improvements that would reduce the facility's annual energy consumption by 32%, offset its annual utility cost by 47%, and improve its resilience for the long-term. If results fell short, Yearout Energy was contractually obligated to pay the difference.

Goals

- Reduce annual energy consumption
- Offset annual utility costs
- Improve long-term resiliency

Yearout Energy Outperforms Initial Savings Estimate

The first phase of renovations to the Metropolitan County Detention Center, completed in 2019, has exceeded this promise.

\$500,000 dollars in annual savings is hard at work covering the cost of the needed improvements.

Results

Yearout Energy improvements have cut the facility's annual \$1 million energy expenditure by 50% for three years.

CASE STUDY Bernalillo County Metropolitan Detention Center

- Replacing 7,000 fixtures with new LED lighting and controls
- Installing 330-kW DC solar photovoltaic system
- Converting boiler plant to use waste gas from nearby landfill for heating
- Replacing over 1,000 tons of cooling
- Replacing 120,000 sq. ft. of roofing with added insulation
- Remediating 90% of duct air leakage
- Retrocommissioning 175 terminal units
- Installing 30 high-efficiency electrical transformers
- Installing evaporative pre-cooling on 960 tons of cooling
- Upgrading vacuum sanitation system with variable-speed drives and high-efficiency motors
- Adding a new air conditioning unit with economizer in computer room
- Weather stripping 100 exterior doors
- Installing 8,000 sq. ft. of phase change material

Award-Winning Results Earn Phase 2 Project

The project has won multiple awards, including Regional Project of the Year by National Association of Energy 2019 and Project of the Year for the NM Energy Services Coalition.

Ralph Fernandez, Chief of Corrections, summed up Phase 1 of the project in this way, "In all my years of experience dealing with different maintenance projects, this is the utmost, seamless, excellent project I have ever been a part of." The county's satisfaction was further confirmed when it recently engaged Yearout Energy for its second phase of renovations.



- **Regional Project of the Year - National Association of Energy - 2019**



- **Project of the Year - New Mexico Energy Services Coalition - 2019**

Alex Montano,
Executive Vice President of Yearout Energy Services said,

"This has been one of the most meaningful projects Yearout Energy has completed. MDC is by far the county's biggest energy consumer. It's a highly sensitive facility that needed a lot of help and we were able to address their infrastructure and resilience needs and while lowering the county's carbon footprint

Half a million in annual cost savings is massive! To have accomplished a 50% reduction and proven it three years in a row and been asked to begin Phase 2, we're extremely proud of that.

The national recognition this project has earned positions Bernalillo County as a leader in this meaningful work: Reducing operational costs, improving operations and resilience, and achieving its sustainability objectives."



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