### FUNDING ENERGY EFFICIENCY PROJECTS

NEW MEXICO

Energy, Minerals and Natural Resources Department

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### AGENDA

- What is a Performance Contract (PC)
- **NM** law and history of PC in the state
- What is the process
- What are the benefits
- How are they structured
- **ECMD's Role and Third Party Reviewer**



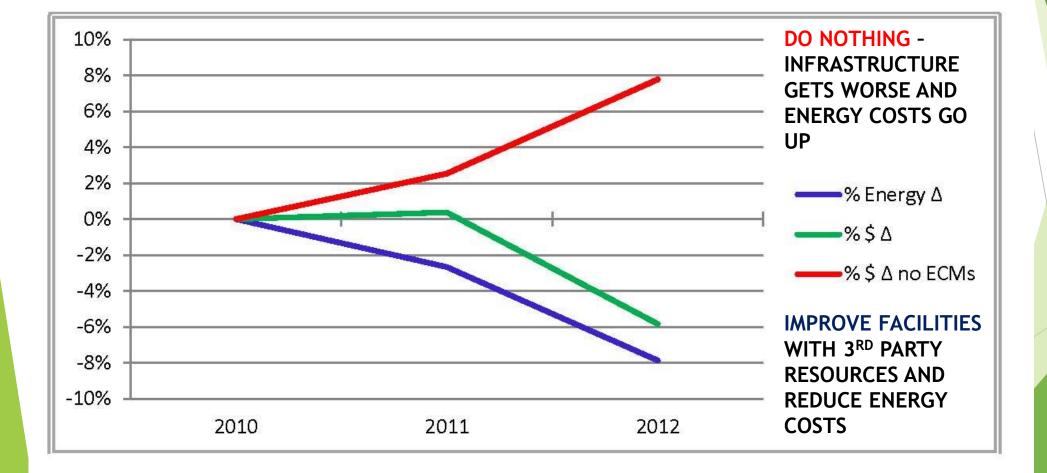
# WHAT IS A PERFORMANCE CONTRACT?

A construction project on a facility that uses future energy savings to pay for up-front costs of the project - eliminating the need to dip into capital budgets. These qualified construction measures include:

- Lighting upgrades
- Solar installation
- Heating, air conditioning, boilers upgrades
- Chiller replacement, building controls



# CONTINUE TO PAY HIGH UTILITY BILLS OR IMPROVE FACILITIES

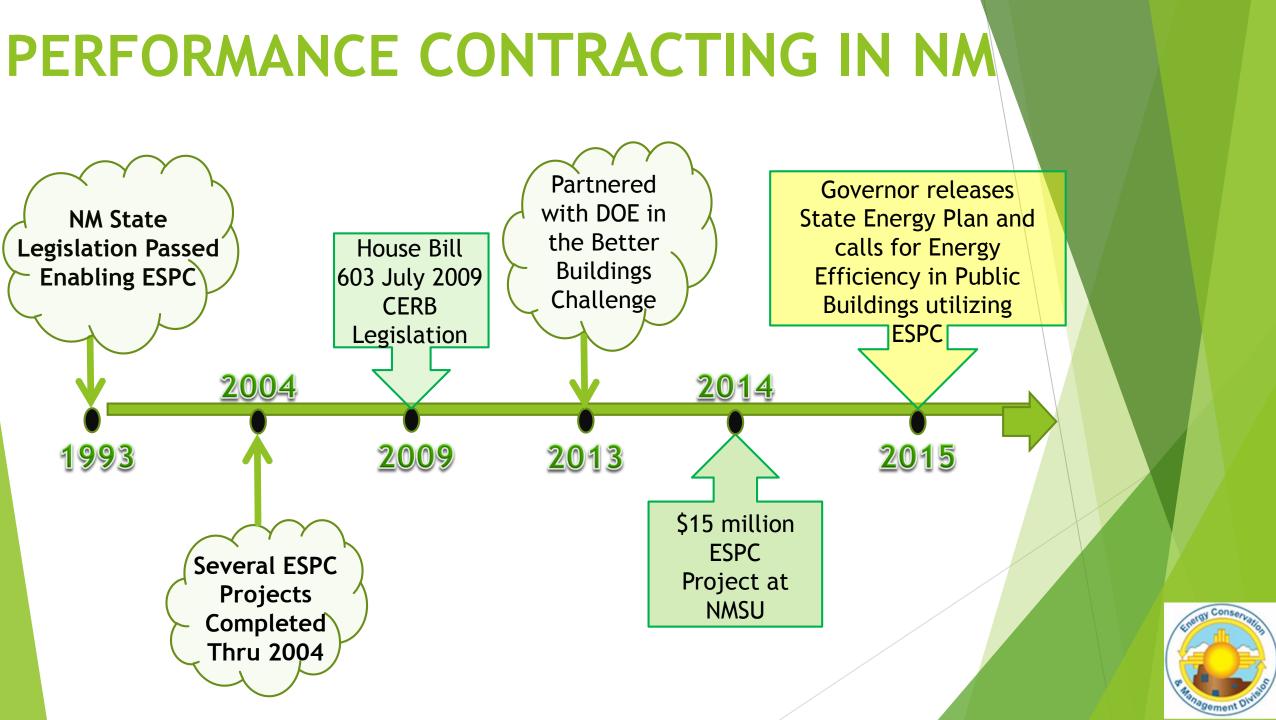


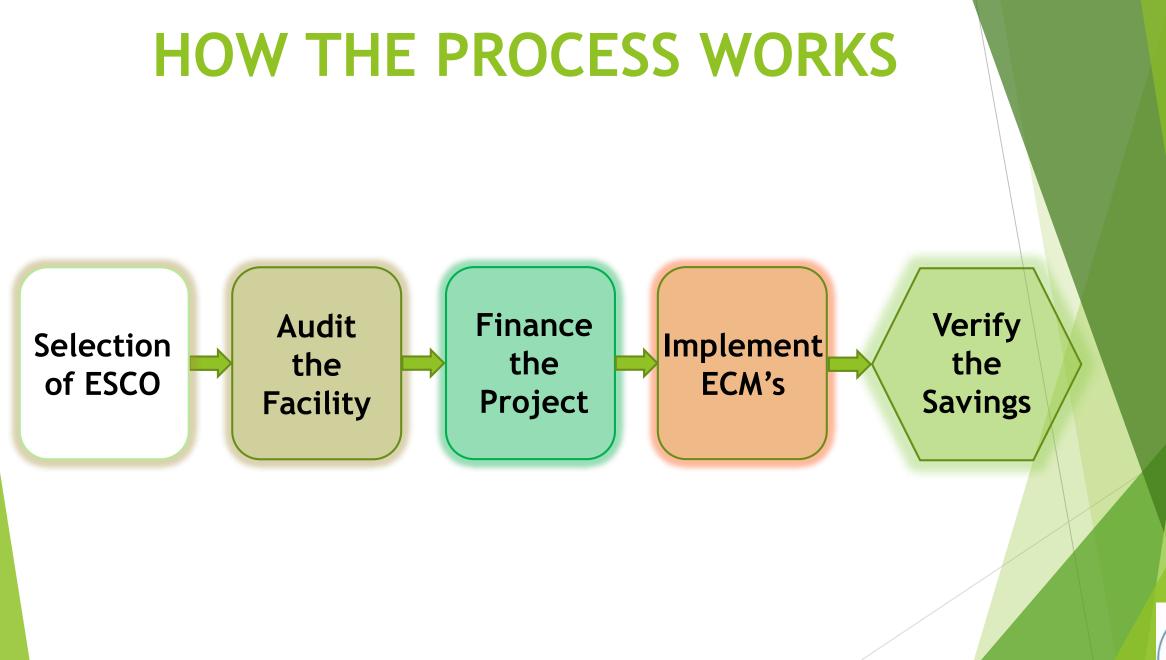




Over \$75 million of infrastructure improvement in NM since 1995









# SIGNIFICANT BENEFITS OF THE PROCESS

# SCOPE OF WORK

#### **SAVINGS**

TERM

\* Guaranteed Work No Change Orders

### \* Guaranteed Energy/Cost Savings

\* Guaranteed Payback Time Period



# HOW TO SELECT AN ESCO??

- Statewide Price agreement # 15-000-14-05759AA - Seven fully vetted, prequalified ESCO's
  - Ameresco
  - ECI/OpTerra
  - Johnsons Controls
  - McKinstry
- Request For Proposal (RFP)

- Noresco
- Seimens
- Yearout/Yesco



# WHAT IS A FACILITY ENERGY AUDIT?

#### Preliminary Energy-Use Analysis

- · Calculate Btu/sf
- · Compare to similar

#### Level 1 Audit: Walk-Through

 Rough costs and savings for energy efficiency measures

#### Level 2 Audit: Energy Survey & Analysis

- · End-use breakdown
- Detailed analysis
- Cost & savings for energy efficiency
- measures
- · O&M changes

#### Level 3 Audit: Detailed Survey & Analysis

- Refined analysis
- Additional measurements
- Hourly simulation



### PERFORMANCE CONTRACTING CASH FLOW EXAMPLE

Annual Utility Costs Project \$\$ Savings Ongoing M&V + Services

Annual PC Payments

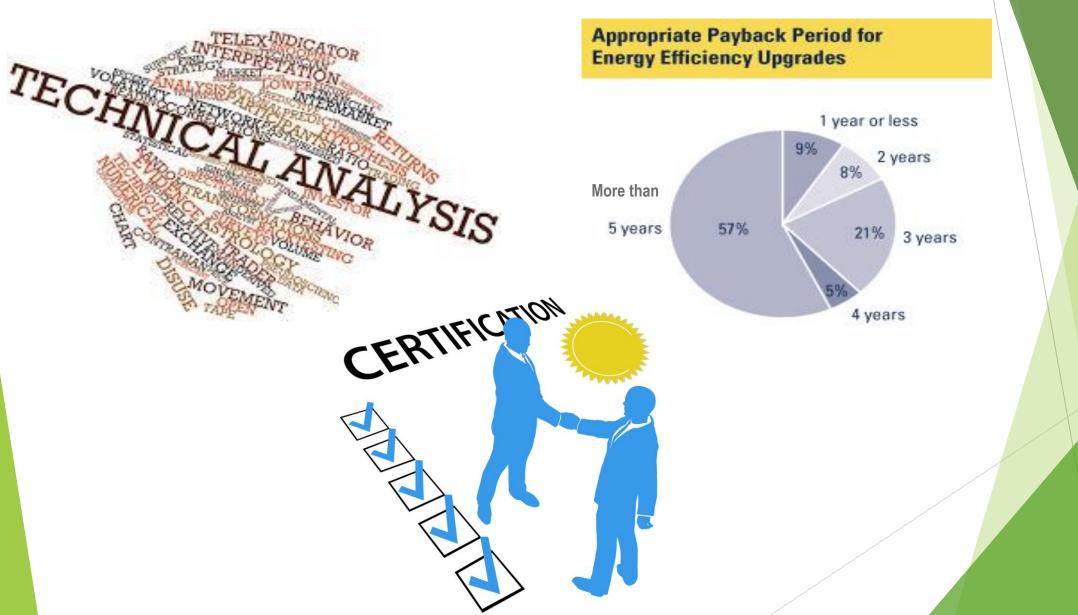
Annual Utility Costs

**Prior to PC** 

During Term of PC



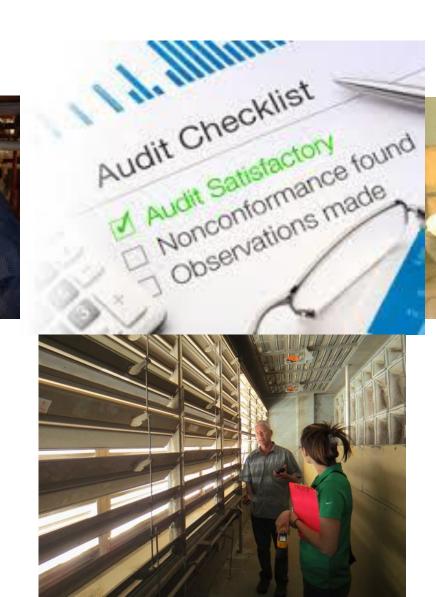
# ECMD's ROLES & RESPONSIBILITIES





### **THIRD PARTY REVIEWER**









# COMPLETED LOCAL GOVERNMENT PROJECTS

#### **Completed ESPC Projects**

City of Bloomfield McKinley County Sunland Park

#### **Completed PPA Projects**

City of Alamogordo Bernalillo County Silver City Truth or Consequences Deming Project CostGuar\$453,762\$30,0\$2,401,017\$333\$257,979\$14,4

**Guaranteed Savings** \$30,062 \$333,581 \$14,498

\$4,805,814 \$6,742,480 \$5,943,985 \$5,616,613 \$4,592,797

\$156,433 \$240,431 \$169,779 \$325,628 \$157,010



# **PROJECTS UNDER CONSIDERATION**

#### In the Works

Bernalillo County MDC City of Las Cruces City of Gallup Sandoval County Dona Ana County City of Santa Fe City of Espanola Acoma Pueblo Aztec Schools (Self funded) **Pojoaque Public Schools** Western New Mexico University Monte Del Sol Charter School NMM

#### Possible Future Projects

**DOE Grant Waste Water Partners** 

City of Espanola City of Tucumcari Village of Ruidoso Town of Taos Mora



### **NMSU Project Overview**

#### Selected as the 2015 New Mexico Large Energy Project Of the Year

Selected Energy Measures= \$15 million
Annual Savings \$1.4 million
Utility Rebates \$1 million

ECM-1: Interior Lighting ECM-2: Exterior Lighting ECM-3: Exterior Pole Mounted Lighting ECM-6: Retro-Commissioning ECM-7: Variable Air Volume Retrofit ECM-10: Economizer Upgrade or Repair ECM-10: Economizer Upgrade or Repair ECM-12: Chilled Water Bypass ECM-19: Natural Gas Delivery Consolidation ECM-26: Satellite Plant Energy Savings CO1: 108 kW-DC PV System on Parking Lot CO2: 73.2 kW-DC PV System on Parking Lot 100 Phase II\*





# PERFORMANCE CONTRACTING SOLUTIONS

Provides a Self Funded solution for an Energy Project.
 Future Energy Savings will PAY for the Project.

#### OR

- 2. Provides added funding to **Supplement** the Energy Project. Future Energy Savings will:
  - Supplement the Project budget
  - Allow the Project scope to be expanded

Both Options provide a <u>Guaranteed</u> Solution.





# THANK YOU!!!



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