



New Mexico Finance Authority Oversight Committee

Energy Efficiency and Renewable Energy
Bonding Act

September 20, 2016

Energy Efficiency and Renewable Energy Act

- At its 2005 Regular Session, and subsequently amended at its 2007 Regular Session, the Legislature of the State of New Mexico authorized the New Mexico Finance Authority to issue and sell bonds for energy efficiency improvements in an amount not to exceed \$20 million outstanding at any one time.
- The Energy Efficiency Bonding Act is available to public schools and state agencies as a tool implement energy saving measures.
- Energy projects must complete an assessment (energy audit) that analyzes what measures can be taken to create energy savings and the costs associated.



Energy Efficiency and Renewable Energy Act

- The Energy, Minerals and Natural Resources Department reviews the assessment and must certify the need to issue Energy Efficiency Bonds based on the energy audit results.
- Though secured by the State Gross Receipts Tax, Energy Efficiency Bonds are ultimately repaid through the annual budgeting process by withholding 90% of the annual estimated savings from the requesting entity's budget.
- Assuming that project produces the level of savings identified by the assessment, both the state agency's/school district's budget and the State's General Fund should realize a net positive gain.

Energy Efficiency and Renewable Energy Act

- There have been four (4) bonds to date issued under the program:
 - 1) **Department of Cultural Affairs:** retrofit energy efficiency measures at the Museum of Space History (Alamogordo), Museum of Natural History (Albuquerque), and Museum of Fine Arts (Santa Fe).
 - 2) **Socorro Consolidated School District:** retrofit energy efficiency measures including lighting and HVAC improvements at Socorro High School.
 - 3) **Mountainair Public School District:** retrofit energy efficiency measures including lighting, solar thermal, HVAC, and roof improvements at the administration building, elementary school and gymnasium.
 - 4) **Santa Fe Public School District:** Constructed PV solar array systems at Santa Fe High School and Ramirez Thomas Elementary School.

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- The Act has established \$20 million ceiling on the amount of par bonds that can be outstanding at any given time. Remaining capacity of the program:

Entity	Amount Issued	Amount Outstanding	Maturity
DCA	\$368,780	\$147,294	2020
Socorro CSD	\$419,906	\$331,040	2032
Mountainair PSD	\$363,668	\$283,919	2027
Santa Fe PSD	\$2,962,734	\$2,962,734	2041
Totals	\$4,115,088	\$3,724,987	
Bond Ceiling		\$20,000,000	
Remaining Capacity		\$16,275,013	

Case Study:

Santa Fe Public School District



Santa Fe Public School District

- In 2010, Santa Fe PSD began a conservation program to:
 - Reduce energy/water/waste/resource use
 - Reduce utility expenditures, redirect more of the Operational Budget to the classroom
 - Reduce District's negative impact on the environment
 - Increase sustainable practices in the organization with all stakeholders
 - Model environmental stewardship and fiscal responsibility

Santa Fe Public School District

- Accomplishments of the conservation program include:

Pre-Program Benchmark Year of 2010/11	5th Year of Program - FY 2015
<ul style="list-style-type: none">17,502,123 FF kwh electricity used93,321 mmbtus of natural gas burned55,385,149 gallons of water consumed½ kw of solar PV generating1,445 kwh solar power produced6.7% waste recycled (rate)0 schools food waste composting	<ul style="list-style-type: none">15,663,877 FF kwh used – down 10.5%70,807 mmbtus of nat gas – down 24%32,074,953 gals of water – down 42%465 kw of solar PV (+ 65 thru March 2016)616,765 kwh solar power produced33% waste recycled (rate)14 schools food waste composting

Santa Fe Public School District

- Santa Fe High- 900 kw system to produce 65% of School's electricity (\$2.6 million project cost).



Santa Fe Public School District

- Santa Fe High's PV solar system has completed construction.



Santa Fe Public School District

- Ramirez Thomas Elementary- 117 kw system to produce 31% of School's electricity (\$416.3 thousand project cost).





Fiscal Year	Ramirez Thomas Net Utility Savings	SF High Meter E2 Net Utility Savings	SF High Meter E3 Net Utility Savings	SF High Meter E4 Net Utility Savings	SF High Meter E5 Net Utility Savings	Combined Net Utility Savings	Annual NMFA Debt Service	Annual Positive Cashflow
2016-17	\$ 10,148.57	\$ 38,356.23	\$ 15,601.68	\$ 26,722.82	\$ 38,377.46	\$ 129,206.76	\$ 107,635.36	\$ 21,571.40
2017-18	\$ 15,401.04	\$ 58,044.76	\$ 23,597.35	\$ 40,707.34	\$ 58,074.29	\$ 195,824.78	\$ 167,591.60	\$ 28,233.18
2018-19	\$ 15,671.38	\$ 58,819.59	\$ 23,893.15	\$ 41,659.56	\$ 58,845.61	\$ 198,889.28	\$ 170,348.86	\$ 28,540.42
2019-20	\$ 15,946.37	\$ 59,608.37	\$ 24,194.35	\$ 42,638.59	\$ 59,630.84	\$ 202,018.52	\$ 173,165.68	\$ 28,852.84
2020-21	\$ 16,226.10	\$ 52,473.87	\$ 24,501.03	\$ 39,579.61	\$ 52,358.02	\$ 185,138.64	\$ 157,974.24	\$ 27,164.40
2021-22	\$ 16,510.65	\$ 49,342.39	\$ 24,813.29	\$ 38,591.89	\$ 49,155.87	\$ 178,414.09	\$ 151,921.18	\$ 26,492.91
2022-23	\$ 16,800.10	\$ 50,204.23	\$ 25,131.22	\$ 39,671.09	\$ 50,014.48	\$ 181,821.12	\$ 154,988.34	\$ 26,832.78
2023-24	\$ 17,094.54	\$ 51,080.92	\$ 25,454.92	\$ 40,780.15	\$ 50,887.90	\$ 185,298.43	\$ 158,117.46	\$ 27,180.97
2024-25	\$ 17,394.04	\$ 51,972.74	\$ 21,951.10	\$ 41,919.88	\$ 51,776.38	\$ 185,014.16	\$ 157,861.32	\$ 27,152.84
2025-26	\$ 17,698.71	\$ 52,879.95	\$ 20,379.53	\$ 43,091.14	\$ 52,680.18	\$ 186,729.51	\$ 159,405.96	\$ 27,323.55
2026-27	\$ 18,008.62	\$ 53,802.80	\$ 20,735.49	\$ 44,294.80	\$ 53,599.57	\$ 190,441.28	\$ 162,746.06	\$ 27,695.22
2027-28	\$ 18,323.87	\$ 54,741.56	\$ 21,097.59	\$ 45,531.74	\$ 54,534.81	\$ 194,229.57	\$ 166,155.48	\$ 28,074.09
2028-29	\$ 18,644.54	\$ 55,696.52	\$ 21,465.93	\$ 46,802.89	\$ 55,486.18	\$ 198,096.07	\$ 169,635.50	\$ 28,460.57
2029-30	\$ 18,970.74	\$ 56,667.95	\$ 21,840.62	\$ 48,109.19	\$ 56,453.96	\$ 202,042.46	\$ 173,186.92	\$ 28,855.54
2030-31	\$ 19,302.55	\$ 57,656.13	\$ 22,221.78	\$ 49,451.61	\$ 57,438.41	\$ 206,070.49	\$ 176,812.36	\$ 29,258.13
2031-32	\$ 19,640.08	\$ 58,661.36	\$ 22,609.51	\$ 50,831.15	\$ 58,439.84	\$ 210,181.94	\$ 180,512.22	\$ 29,669.72
2032-33	\$ 19,983.42	\$ 59,683.91	\$ 23,003.92	\$ 52,248.83	\$ 59,458.54	\$ 214,378.63	\$ 184,290.18	\$ 30,088.45
2033-34	\$ 20,332.67	\$ 60,724.11	\$ 23,405.13	\$ 53,705.71	\$ 60,494.80	\$ 218,662.41	\$ 188,145.26	\$ 30,517.15
2034-35	\$ 20,687.93	\$ 61,782.23	\$ 23,813.26	\$ 55,202.86	\$ 61,548.92	\$ 223,035.20	\$ 192,080.60	\$ 30,954.60
2035-36	\$ 21,049.31	\$ 62,858.61	\$ 24,228.43	\$ 56,741.39	\$ 62,621.22	\$ 227,498.95	\$ 196,097.82	\$ 31,401.13
2036-37	\$ 21,593.88	\$ 64,313.85	\$ 24,802.78	\$ 58,515.86	\$ 64,079.28	\$ 233,305.65	\$ 201,323.86	\$ 31,981.79
2037-38	\$ 22,056.29	\$ 65,607.82	\$ 25,308.40	\$ 60,237.32	\$ 65,372.50	\$ 238,582.34	\$ 206,073.16	\$ 32,509.18
2038-39	\$ 22,436.66	\$ 66,740.84	\$ 25,745.41	\$ 61,906.99	\$ 66,501.21	\$ 243,331.10	\$ 210,347.02	\$ 32,984.08
2039-40	\$ 22,823.56	\$ 67,893.39	\$ 26,189.96	\$ 63,622.80	\$ 67,649.37	\$ 248,179.08	\$ 214,709.68	\$ 33,469.40
2040-41	\$ 23,217.13	\$ 69,065.81	\$ 26,642.17	\$ 65,386.02	\$ 68,817.33	\$ 253,128.46	\$ 219,165.06	\$ 33,963.40
	\$ 465,962.74	\$ 1,438,679.97	\$ 582,628.00	\$ 1,207,951.23	\$ 1,434,296.98	\$ 5,129,518.93	\$ 4,400,291.18	\$ 729,227.75



Energy Efficiency and Renewable Energy Act

- When considering approval of the Santa Fe PSD Bonds, the NMFA Board of Directors asked staff to take a look at the Act for potential improvements to overall process.
- Enclosed is a working draft bill that redlines changes to the Act.
- Changes to the Act include:
 - Expanding the program to include Higher Education Institutions.
 - Clarifies processes involving review of the energy assessment, bond certification and roles of different stakeholders involved in the program.
 - Changes the transfer of energy savings so that they are retained in the State General Fund.



New Mexico Finance Authority

207 Shelby Street

Santa Fe, NM 87501

505-984-1454

www.nmfa.net