

Clean Coal/Wind/Solar Cost Analysis

Clean Coal Reducing Ash and Particulates and Capturing CO ₂	Generation MW	Generation Cost \$/MWYr	Cost for Generation with Dirty Coal \$/Yr	Fuel Usage Tons/Yr	Water Usage Gal/Yr	Coal Cleaning \$/Ton	Fluidized Bed Combustion Cost \$/Yr	CO2 Emissions Tons/Yr	Carbon Capture and Storage \$/Yr	Jobs Created Construction and O&M	Jobs Value to County \$/yr	Net Adjusted Generation Costs \$/Yr	Initial Assumed Cost Cents/kWh	Adjusted Assumed Cost Cents/kWh
	500	\$332,880	\$166,440,000	1,051,200	6,014,178,000	\$21,497,916	\$300,000,000	4,432,560	\$265,953,600	669	\$2,792,830	\$751,098,686		3.8
	Based on \$38/MWh ¹		Based on 120 Tons/Hr ⁵	Based on 690 Gal/MWh ⁶	Based on \$4.85/Ton ³	Based On \$600/kW ⁴	Based on 920Kg CO ₂ /MWh ²	\$60/Ton Combusted Coal ⁷						
Wind	Generation MW	Generation Cost \$/MWYr	Total Production Cost \$/Yr	Fuel Savings \$/Yr	Water Savings \$/Yr	Ash and Particulate Reduction Tons/Yr	Avoided Sox Emissions Tons/Yr	Avoided NOx Emissions Tons/Yr	Avoided CO2 Emissions Tons/Yr	Jobs Created Construction and O&M	Jobs Value to County \$/yr	Net Adjusted Generation Costs \$/Yr	Initial Assumed Cost Cents/kWh	Adjusted Assumed Cost Cents/kWh
	500	\$946,080	\$473,040,000	\$36,014,112	\$60,141,780	125,000	34,605	57,294	4,432,560	1,569	\$6,550,000	\$370,334,108	10.8	8.5
	Based on \$108/MWh ⁸		Based on \$34.26/Ton Coal ⁹	Based on \$1/100Gal ¹⁰						Based on JEDI ¹¹	Based on JEDI ¹¹			
Solar Thermal	Generation MW	Generation Cost \$/MWYr	Total Production Cost \$/Yr	Fuel Savings \$/Yr	Water Savings \$/Yr	Ash Reduction Tons/Yr	Avoided Sox Emissions Tons/Yr	Avoided NOx Emissions Tons/Yr	Avoided CO2 Emissions Tons/Yr	Jobs Created Construction and O&M	Jobs Value to County \$/yr	Net Adjusted Production Costs \$/Yr	Initial Assumed Cost Cents/kWh	Adjusted Assumed Cost Cents/kWh
	500	\$1,471,680	\$735,840,000	\$36,014,112	\$0	125,000	34,605	57,294	4,432,560	20,145	\$84,097,992	\$615,727,896	16.8	14.1
	Based on \$168/MWh ⁸									Based on SAM ¹²	Based on SAM ¹²			

1. Cholla Power Plant Average Total Cost of Generation; 2. Controlling Power Plant CO2 Emissions: netl.doe.gov; 3. Energy Citations: osti.gov; 4. PFBC: worldbank.org; 5. Responsibility Report: Pinnacle Corporation; 6. Renewing Arizona's Economy: PIRG Education Fund; 7. CCS: fossil.energy.gov; 8. AZ Renewable Energy Assessment: Black and Veatch; 9. World Price Index, 2007; 10. Residential Water Bill: April, 2008; 11. Jobs and Economic Impact Model: National Renewable Energy Laboratory; 12. Solar Aptitude Model: National Renewable Energy Laboratory