

Environmental Benefits

Type Of Pollution	Health Effect	Environmental Effect	Reduction / kWh	Pollutants Reduced
Greenhouse Gasses (CO ₂)	Can cause respiratory and other health problems, particularly in children and the elderly	Climate change on a global scale has been attributed to increased emissions of carbon dioxide (CO ₂)	1.657 lbs/kWh	3,276,537
				lbs (CO ₂) reduced
Volatile Organic Compounds (VOCs)	Ozone (smog) effects, cancer and other serious health problems	Ozone (smog) effects plants life included vegetation damage.	0.000061 lbs/kWh	121
				lbs (VOCs) reduced
Nitrogen Oxides (NO)	Lung damage, respiratory illness, ozone (smog) effects	Acid rain also causes buildings, statues and monuments to deteriorate.	0.001523 lbs/kWh	3,011
				lbs (NO) reduced
Carbon Monoxide (CO)	Reduces ability of blood to bring oxygen to body cells and tissues	One of the six "criteria pollutants" the US EPA tracks related to power production reduces environmental quality	0.00041 lbs/kWh	811
				lbs (CO) reduced
Sulfur Dioxide (SO ₂)	Respiratory illness, breathing problems, may cause permanent damage to lungs	Precursor of acid rain, which can damage trees, lakes, and soil; aerosols can reduce visibility.	0.000956 lbs/kWh	1,890
				lbs (SO ₂) reduced
Particulates (PM ₁₀)	Eye, nose, and throat irritation; lung damage; bronchitis, cancer, early death	Source of haze which reduced visibility. Ashes, smoke, soot and dust can dirty and discolor structures	0.00002 lbs/kWh	39.5
				lbs (PM ₁₀) reduced
Mercury (Hg)	Liver, kidney, and brain damage; neurological and development damage	Accumulates in the food chain.	0.003404 mg/kWh	6,731

Environmental Benefits

On an annual basis, energy/water savings from these projects would equate to:



Removing **277** cars off the road



Powering **198** San Leandro homes



Saving **150,441** gallons of gasoline



Providing drinking water for **23,540** residents



Preserving **39,548** trees from deforestation