

Environmental Benefits

Type Of Pollution	Health Effect	Environmental Effect	Reduction	Pollutants Reduced
Greenhouse Gases (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 + Flare Reduction	832,450
				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	25
				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	632
				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	170
				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	397
				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	8.3
				lbs (PM ₁₀) reduced
Mercury (Hg)	Liver, kidney, and brain damage; neurological and development damage	Accumulates in the food chain.	0.003404 mg/kWh	1,413

Environmental Benefits

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



58

Passenger cars
removed from
roadway



31,500

Gallons of gasoline
saved in one year



8,306

Trees preserved
from deforestation



42

San Leandro
homes powered
for a year