

Maine Consolidated District Environmental Benefits

By reducing your energy use it indirectly lowers energy production at the source. A great deal of the energy, which is consumed your facility(s), is produced by power plants burning fossil fuels. The burning of these fuels contributes to environmental contamination.

According to the United States Environmental Protection Agency, and other groups it can be calculated just how much of the pollutants can be reduced or eliminated based on the amount of energy that is saved. This information differs by area based on several conditions. Below are the most recent factors based on the current generating methods and fuels.

Annual kWh saved through project implementation: **53,829**
 Annual terms saved through project implementation: **3,095**

Type Of Pollution	Health Effect	Environmental Effect	Reduction / kWh	Reduction / Therm	Pollutants Reduced
Greenhouse Gasses (CO2)	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 (CO2)	1.657 pounds / kWh	12.5 pounds / therm	lbs (CO2) reduced 127,885
Volatile Organic Compounds (VOC)	Ozone (smog) effects, cancer and other serious health problems	Ozone (smog) effects plants life included vegetation damage.	0.000061 pounds / kWh	.0005 pounds / therm	lbs (VOC) reduced 4.8
Nitrogen Oxides (Nox)	Lung damage, respiratory illness, ozone (smog) effects.	Acid rain also causes buildings, statues and monuments to deteriorate.	0.001523 pounds / kWh	.014 pounds / therm	lbs (NOx) reduced 125.3
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 pounds / kWh	.0019 pounds / therm	lbs (CO) reduced 28.0
Sulfur Dioxide (SO2)	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 pounds / kWh	.0001 pounds / therm	lbs (SO2) reduced 51.8
Particulates (PM10)	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 pounds / kWh	.0004 pounds / therm	lbs (PM10) reduced 2.3
Mercury (Hg)	Liver, kidney, and brain damage; neurological	Accumulates in the food chain.	0.003404 milligrams / kWh	0 or negligible pounds / therm	Mg of (Hg) reduced 183.2

Saving 10,000 kWh is equivalent to the CO2 sequestered from planting 200 tree seedlings and letting them grow 10 years, taking 1.4 cars off the road for a year, or the energy required to power a typical american home for a year. The conversion of one ther	Or removing	20	cars from the road / year
	Or saving enough energy to power	14	typical american homes for a year
	The annual environmental benefit of this project is equivalent to planting and growing for 10 years	2,890	trees / year

Sources: www.cleaneandgreener.org
 http://www.epa.gov/cleanenergy/energy-resources/calculator.html

