



ENVIRONMENTAL IMPACT of a 500 Megawatt Powerplant

How Can Electrical Energy From Lighting Damage the Environment?

Although it appears innocuous, lighting causes air pollution. Here's how: Each day, your local power plant will commonly burn coal, oil, and gas to generate electricity for your lighting system as well as for your other electrical needs. While burning these fossil fuels produces a readily available and instantaneous supply of electricity, it also generates air pollutants: **carbon dioxide (CO₂)**, **sulfur dioxide (SO₂)**, and **nitrogen oxides (NO_x)**.

Air Pollution Causes Global Warming, Acid Rain and Smog

Each of these pollutants causes environmental damage. Carbon dioxide (CO₂) causes global warming, sulfur dioxide (SO₂) causes acid rain, and nitrogen oxides (NO_x) cause both acid rain and smog.

Reducing the energy equivalent of a 500 Megawatt powerplant will help to decrease air pollution and environmental damage by the following amounts each year:

750,000,000	pounds of Carbon Dioxide
1,250,000,000	grams of Sulfur Dioxide
3,400,000,000	grams of Nitrogen Oxides

By removing those quantities of pollutants from the air, reducing the energy equivalent of a 500 Megawatt powerplant will have the same affect on the environment as:

Planting	91,743	Acres of Trees
Removing	70,822	cars from the road each year or
Saving	45,454,545	gallons of gasoline each year