

Wind Energy Offers Cleaner Air and Saves Water Resources, Too

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We celebrate Earth Day this month, which makes it an opportune time to take a look at the many benefits wind energy provides as a pollution-free energy resource.

Wind power creates a healthier future -- it contributes to cleaner air and better health for Americans as a pollution-free electricity source.

U.S. wind farms cut sulfur dioxide emissions by 76,000 metric tons a year and nitrogen oxide emissions by 106,000 metric tons.

That literally keeps Americans out of the hospital, because these pollutants create smog that can trigger asthma attacks. The Centers for Disease Control and Prevention reports that <u>24.6 million Americans</u> suffer from asthma, including 6.2 million children. When we invest in more wind power, we are investing in the health of our fellow Americans.

According to the Department of Energy's Wind Vision report, <u>by 2050</u>, wind's air pollution reductions will save \$108 billion in public health costs and prevent 21,700 premature deaths.

Wind energy contrasts starkly from other sources of electricity generation, which also emit volatile organic compounds and heavy metals. These pollutants result in <u>serious health effects</u>, including lung cancer, asthma, increased heart disease, and other carcinogenic and neurotoxic effects.

The American Lung Association's <u>State of the Air 2016 report</u>found that more than half of all Americans live in counties where they face exposure to unhealthy levels of air pollutants. However, the report states that the best progress made in 2016 centered on reducing the ozone and year-round particle pollution thanks to cleaner energy and cleaner vehicles.

Wind doesn't just create clean air; it also saves billions of gallons of water every year.

Wind uses virtually no water to generate electricity, <u>saving 35 billion gallons</u> a year by replacing other thirsty electricity sources.

Wind power saves each American about <u>120 gallons of water</u> each year, which is equivalent to 285 billion bottles. It does that because wind needs no water for cooling purposes to generate electricity, unlike other sources of generation. This means no warm water gets dumped into nearby lakes or rivers, causing harm to fish and other wildlife.

As the nation <u>faces areas of drought</u>, these savings become even more important. Farmers in particular have benefited from wind energy's water savings. As an industry that depends on water availability for crops, animals and personal uses, farmers understand how big an impact these savings have.

America's thermal power plants withdrew between 22 and 62 trillion gallons of freshwater in 2008, when wind energy only contributed about 1.5 percent of the U.S. electricity generation. This freshwater comes from the same rivers, lakes, streams and aquifers that we all rely on.

In 2016, wind energy supplied over <u>5.5 percent</u> of U.S. electricity generation, with enough installed to power 24 million homes. By 2050, the Department of Energy's <u>Wind Vision Report</u> says wind energy could realistically provide 35 percent of U.S. electricity, creating a 23 percent reduction in water consumed to generate electricity.

Wind energy is conserving tremendous amounts of freshwater that Americans and our wildlife need. This is just one way wind works for America -- by benefiting the whole country by saving water and contributing to cleaner air. We look forward to enjoying the benefits of cleaner air and more water savings as wind power continues to grow.

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