



Wind and Solar Industries Make Air and Water Cleaner for All Americans

Isak Kvam, Communications/Policy Associate • Apr. 20, 2018

With Earth Day coming up on April 22, it's high time we talk about the environmental benefits the wind and solar industries bring to all Americans every day of the year.

We all benefit from cleaner air, cleaner water and fewer greenhouse gas emissions -- and renewable energy is delivering a cleaner future for everyone.

According to a [report](#) published last year by the Electricity Markets and Policy Group, electricity generated from wind and solar energy in the U.S. from 2007-15 avoided 747 million metric tons of carbon dioxide from being emitted into the air we breathe. That's the equivalent of taking nearly [159 million cars off the road](#).

Together, wind and solar are reducing sulfur dioxide, nitrous oxides and fine particulate matter. That makes a difference in the air we breathe and our quality of life. EMPG estimates wind and solar have avoided 8,000 mortalities and saved \$60.5 billion from avoided air pollution, as well as \$31.5 billion in climate savings. In total, wind and solar have saved Americans about \$92 billion in health and environmental costs over eight years. I think we can all breathe a (cleaner) sigh of relief that clean energy has led to steep cuts in harmful pollutants.

Wind and solar don't just contribute to cleaner air -- they're also conserving more water compared to other electricity generators.

Nuclear, natural gas and coal power plants all rely on using plenty of water to generate electricity. In fact, the power sector [uses more water](#) than any other sector in the U.S., including agriculture. Thermal generation plants withdraw water to circulate for cooling, and a fraction of it is consumed via evaporation or transpiration. In all, thermoelectric power plants consume up to [5.9 billion gallons](#) of fresh water daily from rivers, lakes, streams and aquifers.

In contrast, wind energy uses virtually no water to generate electricity. In 2017, wind power saved roughly [95 billion gallons](#) of water -- that's the equivalent of 290 gallons per person in the U.S. To put it in perspective, that's the equivalent of 144,000 [Olympic-sized swimming pools](#).

In a time of more extreme natural disasters and weirder weather, wind energy is helping us to save our water for other uses. During California's 2014 drought, for example, wind energy saved 2.5 billion gallons of water that the state could use for other purposes. Areas of our country increasingly need more access to clean water, and wind energy is providing flexibility and assurance to these communities across the nation.

There's no doubt that the wind and solar industries are shaping a cleaner, healthier America -- and these environmental benefits are only going to increase.

The U.S. is in the midst of a massive energy transformation toward a clean energy economy. Last year, wind and solar energy [generated](#) 7.6 percent of the country's electricity generation. Nearly half of all [new](#)

[electricity capacity](#) installed last year was wind and solar energy.

These technologies have plenty of opportunity for growth (and indeed, they're growing faster than [many have anticipated](#)), and that growth is accelerating a cleaner future for us and our children. Renewable energy is just smart for a cleaner, stronger America.

This blog post originally appeared in [Morning Consult](#).

Want to learn more about renewable energy? [Sign up for our monthly "Renewable Champions" newsletter](#) to get the latest stories and resources about the Midwest's transition to renewable energy.