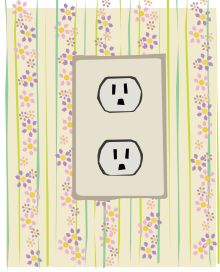


## THE ENERGY WE USE

### The Power of Water

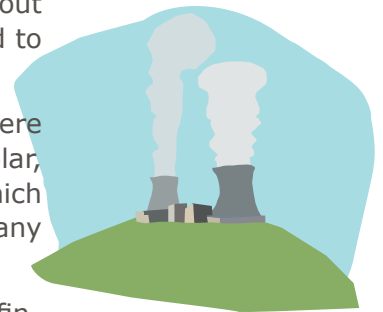


We may not realize it, but when Americans use energy, we're also using water. This is because most of our power comes from thermoelectric power plants, which use heat to generate electricity and require large amounts of water for cooling purposes. These power plants burn oil, natural gas and coal or use nuclear reactors to generate heat, and an astonishing 40 percent of all the fresh water consumed in the country is used to cool them.

It takes water to make energy, and it takes energy to make water! Read more about how we use electricity to purify our water systems, and how our water use is tied to global warming.

Although most of our electricity plants have an enormous appetite for water, there are many alternative energy options that do not consume any water at all. Solar, wind and geothermal power are good examples of these. Even hydropower, which uses massive amounts of water to generate electricity, doesn't actually consume any water.

What's more, our gasoline and oil consumption is also closely tied to water use. Refining oil and gasoline requires large quantities of water, and in 2006, for example, the U.S. Department of Energy estimated that we used 1 to 2 billion gallons of water a day for refining petroleum. Likewise, it takes between 1 and 2.5 gallons of water to refine a single gallon of gasoline - meaning that the 384 million gallons of gasoline that Americans burn daily translates to over a billion gallons of water used per day.



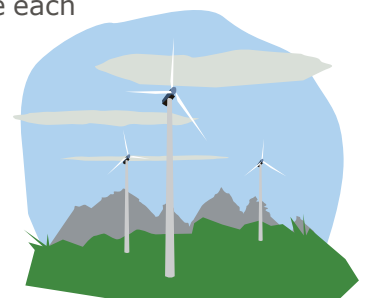
#### Ethanol: gasoline's environmentally-friendly alternative?

As gasoline supplies dwindle, America is turning to ethanol as an eco-friendly alternative fuel. But is ethanol truly green? On average, it takes 3.5 to 6 gallons of water to produce one gallon of ethanol, and this water is generally drawn from Midwestern water supplies that are already under stress due to agriculture and drought. Iowa's ethanol plants, for example, each use around 400 million gallons of water per day - about the same amount that a town of 10,000 people uses each year.

Switching to clean and sustainable energy sources like wind and solar power is an important step towards reducing our energy-related water use. What's most important, however, is that we reduce our energy use, regardless of where our energy comes from. This means switching to energy-efficient appliances and light bulbs, turning off electronics when they're not being used, and carpooling and using public transportation as much as possible. Small efforts to conserve energy really add up, and we each have the power to save.

Learn more about our energy future

[www.newenergychoices.org](http://www.newenergychoices.org)



*Conserve Water, Preserve Life*

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