

Water and the Ethanol Industry

It does take water to make ethanol – about 3 gallons of water for each gallon of ethanol. However, through environmental efforts and developments in technology, ethanol plants have been able to significantly reduce their water usage. We hope to continue to work to reduce water usage.

The facts show that in comparison to other industries, ethanol plants are relatively small users of water. Here are some examples:

- It takes 1,851 gallons of water to refine a 42 gallon barrel of crude oil – 44 gallons of water / gallon of crude oil.
- It takes 62,600 gallons of water to produce one ton of steel.
- It takes 39,090 gallons of water to manufacture a new car.
- It takes 150 gallons of water to produce just one average-sized Sunday newspaper.
- It takes more than 680,000 gallons of water each year to irrigate an acre of a golf course. Stated another way – a typical 40 MGY ethanol plant uses an amount of water daily that is equivalent to the daily use of a standard 18-hole golf course.
- It takes approximately 1 gallon of water to process a quarter pound of hamburger.
- It takes 11.6 gallons of water to process one chicken.
- It takes 9.3 gallons of water to process one can of fruit or vegetables.
- It takes 1,500 gallons of water to process one barrel of beer.
- It takes 24 gallons of water to make one pound of plastic.
- The average American home uses 107,000 gallons of water per year.
- 3/5 gallon of water is required per kilowatt hour at coal fired power plant (1 kWh is required for a 100 watt light bulb to burn for 10 hours).
- 3/4 of a gallon of water is required per kilowatt hour at a nuclear power plant.

Source: U.S Geological Survey, National Renewable Energy Laboratory.