

Environmental Impacts of Corn Ethanol Production: What The Experts Are Saying

Unfortunately the Renewable Fuels Standard (RFS) program is a good example of “environmental problem shifting.” The expected environmental gains from the RFS have yet to be realized, and the RFS has likely have contributed to increased degradation of air, water and soil resources due to overwhelming reliance on corn ethanol.

- In 2011 the National Academy of Sciences – using EPA data and Argonne Lab modeling on greenhouse gases, regulated emissions and energy use in transportation – concluded that [corn ethanol increases greenhouse gas emissions](#).

NAS: “for corn-grain ethanol, life-cycle emissions of major air pollutant species (for example CO, NO_x, PM_{2.5}, VOC, SO_x, and NH₃) are higher than for gasoline.”

- The [Environmental Working Group \(EWG\) agreed](#) in its report, “Ethanol’s Broken Promise,” earlier this year, saying federal corn ethanol mandates under the Renewable Fuel Standard (RFS) have driven up food prices, strained agricultural markets, increased competition for arable land and promoted conversion of uncultivated land to grow crops. EWG said its research found that more than 8 million acres of grassland and wetlands were converted for corn alone and that these changes resulted in annual emissions of 85 million to 236 million metric tons of greenhouse gases.

EWG: *A few recent studies still claim that corn ethanol produces fewer emissions than gasoline, but a careful look reveals that their methods don’t properly account for land use change. Studies that do factor in land use change show that using food crops to produce biofuels – once considered a promising climate change mitigation strategy – is worse for the climate than gasoline.*

Regarding the 2014 RFS volumes proposed rule: *“The Environmental Protection Agency’s pending proposal to cut the amount of corn ethanol that must be blended into gasoline in 2014 by 1.39 billion gallons would lower U.S. greenhouse gas emissions by the equivalent of 3 million tons of carbon dioxide (CO₂e) – as much as taking 580,000 cars off the road for a year.”*

- From a 2013 white paper by the [Clean Air Task Force](#):
If EPA had analyzed corn ethanol produced during 2010-2015... the Agency would have found that corn ethanol’s net emissions over 30 years are approximately 28% higher than the emissions that would result from the use of gasoline over the same period.
- From 2011 congressional testimony by the University of Wyoming’s [Ingrid C. Burke](#): *“... the pollutant amounts emitted during the fuel-production phase (including feedstock production and transportation) are typically higher for corn-grain or cellulosic ethanol than for petroleum-based fuels.”*