## **CLAIM:** Ethanol hurts my car's engine.

- FACT: There are very few documented cases of engine damage caused by ethanol, since most cars on the road (model year 2001 and newer) are approved to run on fuel blends of up to 15 percent ethanol. Millions of flexfuel vehicles (FFVs) are specifically designed to run on blends of up to 85 percent ethanol.
- **CLAIM:** Ethanol is more expensive than gasoline.
- **FACT:** Most of the time, it's not. Wholesale prices for ethanol routinely are less than those for gasoline, even at today's low oil prices, and <u>many stations pass along that discount</u> to consumers.
- CLAIM: Ethanol has less energy content than gasoline, so I get fewer miles per gallon.
- **FACT:** Ethanol does contain <u>less energy</u>, as measured in British Thermal Units, than the equivalent amount of gasoline. But that doesn't translate directly to higher miles per gallon (mpg). Vehicles that are optimized to run on higher ethanol blends can significantly narrow the mpg gap. Considering the cheaper price point for ethanol, drivers who use higher ethanol fuel blends could end up paying less per mile driven than with regular gasoline.
- **CLAIM:** Corn-based ethanol steals food out of people's mouths.
- FACT: The corn used for ethanol is not the same corn we usually eat. The kind we get from a cob or a can is called sweet corn, and that makes up only 1 percent of all corn grown. The rest is "field corn," an especially starchy variety grown specifically for products like corn meal, high-fructose corn syrup (an essential ingredient in soft drinks), animal feed, carpet, shoe polish and, yes, ethanol. Also, a co-product of field corn is distillers grains, used as feed for dairy and beef cattle. There's plenty to go around for food, industrial products, livestock feed, and fuel.
- **CLAIM:** Using corn for ethanol drives up the price of corn and other food.
- FACT: Corn prices are relatively low, owing to the worldwide oversupply. Prices for the commodity have ranged from \$3.50 a bushel to about \$4.30 this year, compared with more than \$8 in mid-2012. Prices for many food commodities, corn included, actually more closely track the price of oil, due to the fuel costs incurred in producing and transporting them. A recent report by the Food Policy Research Institute, funded by the U.S. government, the World Bank and other entities, found no clear link between biofuels production and higher prices that would limit access to food.
- **CLAIM:** Using ethanol produces more greenhouse-gas (GHG) emissions than gasoline.
- FACT: When the "lifecycle" emissions of a fuel are taken into account adding up the gases created from the harvest, production, transport and combustion of the fuel inside an engine corn-based ethanol comes out ahead of gasoline. According to the Argonne National Laboratory's comprehensive GREET (Greenhouse gases Regulated Emissions and Energy use in Transportation) model, corn-based E85 ethanol blend produces 24.7 percent less GHG emissions than regular gasoline.
- CLAIM: The ethanol industry receives federal subsidies, a waste of taxpayer money.
- FACT: Not true. Those ended in 2011.
- **CLAIM:** The ethanol market would fall on its face without the federal mandate requiring that gasoline contain 10 percent ethanol.
- **FACT:** Without the mandate, oil refineries could very well continue using ethanol, because it's <u>cheaper than the toxic</u>, <u>carcinogenic additives</u> that would otherwise be necessary to bring the gasoline up to the legally required minimum octane rating.
- CLAIM: Engines have less power and weaker performance when running on ethanol.
- **FACT:** Ethanol naturally has a <u>higher octane rating</u> than regular gasoline, and many drivers report increased horsepower and better performance. More power is a reason NASCAR runs on E15; the IndyCar racing series runs on E85.
- **CLAIM:** Higher ethanol blends damage smaller two-stroke engines like those in motorcycles.
- **FACT:** E15 and higher ethanol blends are not approved by the EPA for use in motorcycles. Although <u>incidents of</u> <u>misfueling or engine damage</u> related to use of E15 in motorcycles are rare, owners should consult their manuals to be sure.
- CLAIM: Ethanol ruins engines in boats, lawn mowers, chainsaws and leaf blowers.
- FACT: Verified accounts of such damage in small-equipment motors <u>are scant</u>. The vast majority of people use regular gasoline (nearly all of which contains 10 percent ethanol) without any problems. As for boats, some owners have optimized their crafts to <u>run efficiently on ethanol blends higher than E10</u>, and many racers swear by the horsepower boost they get from E85. However, officially, the EPA says blends higher than 10 percent are not approved for boats or small motors.
- **CLAIM:** Ethanol corrodes engine parts, including rubber fuel lines.
- FACT: Materials used in cars built in the last 15 years <u>have been rigorously tested for compatibility</u> with ethanol in gasoline, over the entire useful life of the vehicle. Older vehicles are often compatible as well. If an engine is not compatible with ethanol, the owner's manual will clearly say so.
- CLAIM: The U.S. doesn't need ethanol as a transportation fuel because we have plenty of oil.
- **FACT:** Actually, we import more than one-third of the <u>19 million barrels of oil we use every day</u>. We can never drill our way to oil independence, so the solution is to open the market to affordable fuel alternatives that can be used in place of gasoline in vehicles we already drive. Ethanol not only is a cleaner, cheaper alternative to gasoline, using more of it will reduce the amount of oil we have to import from foreign countries.