





**EVER SINCE LAST SUMMER**, when gas prices bounced as high as \$3 a gallon, sales of fuel-efficient Toyotas and Hondas have been booming, and the Big Three are struggling to retain half the U.S. auto market. Rather than employing technology to achieve major mileage increases, however, Detroit is trying to fool people by making gas-guzzlers that can guzzle ethanol as well. These flexible-fuel vehicles (FFVs) can theoretically run on E85--a blend of 85 percent ethanol and 15 percent gasoline. In practice, though, 99 percent of them run on gas alone.

General Motors (GM) is hyping its FFV program with a series of ads like the one at right. Ford, which last June retracted its previous promise to sell 250,000 hybrid vehicles a year by 2010, joined DaimlerChrysler in pledging to double production of FFVs. It's a cheap fix for the automakers: Converting a standard car or truck to flexible fuel costs only about \$100 per vehicle. And even though FFVs get worse mileage than cars that run on gas, federal fuel-economy regulations pretend otherwise, so for each FFV, the automakers are allowed to produce two more gas-guzzlers.

 **1** What if every vehicle in America was yellow? What if they could run on E85 ethanol, an alternative fuel made from corn? America could move towards energy independence with a homegrown, renewable fuel source that **2** reduces greenhouse emissions while it **3** boosts your engine's performance. Can every vehicle in America run on yellow? Not yet. But GM already has 1.5 million FlexFuel Vehicles on the road that can **4** run on gas or E85 ethanol. And it's just the beginning. Join the ride. Help turn your world yellow at [LiveGreenGoYellow.com](http://LiveGreenGoYellow.com). Learn more about E85 ethanol, which GM vehicles can run on it, **5** where you can get it and **6** how you can make a difference. One car company can show you how.

Only 

1. If every vehicle in the United States were powered by ethanol, only one of eight would be driveable. Already, 20 percent of the nation's corn goes to ethanol production. Replacing just one-eighth of U.S. gasoline consumption would require the country's entire corn crop.
2. Corn-based ethanol's contribution to fighting global warming is marginal at best. A debate is raging, in fact, over whether ethanol takes more energy to produce than it provides. Ethanol burns cleaner than gasoline, but its production relies heavily on diesel-chugging tractors and petroleum-derived fertilizers, to the tune of some 140 gallons of oil per acre. Distilling corn into ethanol is also energy intensive, and while some forward-thinking producers are processing it with methane, biomass, and other alternative fuels, most of the 190 ethanol plants now in the works will be powered by coal. A recent survey by the University of California at Berkeley found that corn-based ethanol cuts greenhouse-gas emissions by, at best, 13 percent over gasoline.
3. Ethanol does boost octane, and thereby engine performance, but supplies less energy per gallon than gasoline. While it is somewhat less expensive than gas, its lower energy content means you get fewer miles per gallon. [Greencarcongress.com](http://Greencarcongress.com) calculates that based on September 2005 prices, it would cost \$2,781 to drive a Chevy Tahoe FFV 15,000 miles on E85, compared with \$2,444 for regular gasoline. Until the price of E85 drops to about 72 percent of gas, consumers won't see any savings.
4. If it's energy independence you're interested in, it might be better to turn your world to switchgrass, the prairie grass touted by President George W. Bush in his 2006 State of the Union address. Fuel produced from switchgrass and plant waste is known as "cellulosic ethanol" and is generally considered environmentally preferable to corn-based fuel. It doesn't take a mountain of pesticides to grow and might (theoretically, at least) require much less energy to distill. A lot of research remains to be done before cellulosic ethanol will be ready for prime time.
5. GM boasts that it has produced more than 1.5 million FFVs. But E85 is available at only 918 of 170,000 public gas stations nationwide, almost all of them in the Midwest. California and Oregon have three each, New Jersey none at all. (To locate the closest station, visit the Department of Energy's Alternative Fuels Data Center at [eere.energy.gov/afdc](http://eere.energy.gov/afdc).) Rather than boosting fuel-efficiency standards, the Big Three are lobbying Congress to pay gas-station owners \$30,000 each to offer E85.
6. Even come the golden age of cellulosic ethanol produced in zero-emission plants, you'd still do more to stop global warming by driving a vehicle with high fuel efficiency. It wouldn't be hard to beat the E85 mpg ratings of the GM products pictured above: from left, the Chevy Avalanche (11 mpg city, 14 mpg highway); the Chevy Monte Carlo (16 city, 24 highway); the GMC Yukon (11 city, 14 highway); and the Chevy Impala (16 city, 23 highway).