



E85

What is Ethanol?

Ethanol is an alcohol-based alternative fuel produced by fermenting and distilling starchy crops that have been converted into simple sugars. Feedstocks include corn, sugar beets, sugar cane, sorghum, barley, and wheat. Ethanol can also be produced from "cellulosic biomass" such as corn stover, trees and grasses and is called bioethanol. Ethanol is most commonly used to increase octane and improve the emissions quality of gasoline.

Ethanol can be blended with gasoline to create E85, a blend of 85% ethanol and 15% gasoline. E85 and blends with even higher concentrations of ethanol, E95, for example, qualify as alternative fuels under the Energy Policy Act of 1992 (EPA Act). Vehicles that run on E85 are called flexible fuel vehicles (FFVs) and are offered by several vehicle manufacturers.

Colorado's Ethanol Plants

1. Front Range Energy, 40 MMgy
2. Merrick Company at Coors Brewery, 1.5 - 3 MMgy
3. Sterling Ethanol, 42 MMgy
4. Cottonwood Farms, Walsh, CO, proposed 3.5 MMgy
5. *Great Western Ethanol LLC, Evans, CO, proposed 100 MMgy
6. *Panda Energy, Yuma, CO proposed 100 MMgy
7. *U.S. BioGen LLC, near Fort Morgan, CO, proposed 100 MMgy
8. *Yuma Ethanol LLC, Yuma, CO, proposed 50 MMgy

*Ethanol Producer Magazine, May 2006 www.ethanolproducer.com

Note: Ethanol production and plant Information is subject to change.



E85 Retail Availability in Colorado

Colorado has 12 public E85 retail sites located in Aurora, Bennett, Brush, Colorado Springs, Denver, Greeley, Holyoke, Lakewood, Pueblo, Watkins, Yuma, and Arvada. For more information, visit:

<http://www.e85fuel.com/database/locations.php?state=coColorado>.

U.S. Department of Energy - Energy Efficiency and Renewable Energy

Alternative Fuels Data Center, Ethanol Benefits

- **E85 is easy to use and handle** - E85 fueling equipment is slightly different and of similar cost to equipment used to store and dispense petroleum fuels. In most cases it may be possible to convert your existing petroleum equipment, through reasonable costs, to handle E85; some installations may, however, be very expensive.
- **Using E85 reduces petroleum consumption** - Use of E85 will reduce the US' overall use of petroleum and replace it with a renewable-based fuel produced ("grown") in the United States.
- **E85 is good for the environment** - Beyond operational ease, E85 offers considerable environmental benefits. To learn more about fuel economy, greenhouse gas scores, and air pollution scores for individual vehicles, go to the U.S. Department of Energy/U.S. Environmental Protection Agency's on-line [Fuel Economy Guide](#). You can [search for E85-fueled vehicles](#) by selecting "flexible-fueled vehicles" in the "Select Vehicle Type" pull-down menu. Once you are there, select individual vehicles to get fuel economy, greenhouse gas, and air pollution details.
- **Flexible Fuel Vehicles (FFVs) are available and affordable** - FFVs specifically designed to run on E85 are becoming more common each model year, and FFVs are typically available as standard equipment – in most cases without incremental cost. [See the current model year FFVs](#).
- **FFVs have flexible fueling options** - FFVs may operate on gasoline, and, in fact, most of the 6 million FFVs on US roadways do today. Although that is not a positive from an E85-use standpoint, it does underscore the *flexibility* FFVs offer fleets. When E85 is not available, or an FFV travels outside the fueling network, a driver may simply fuel with either straight gasoline or any blend of ethanol and gasoline up to E85 as the situation dictates.

For more information: <http://www.eere.energy.gov/afdc/altfuel/ethanol.html>

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