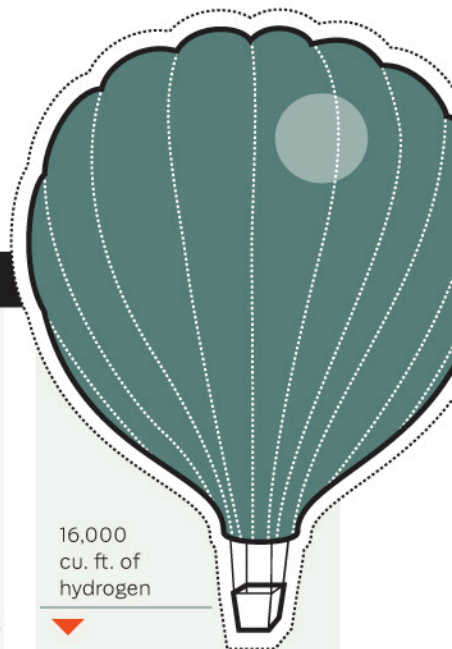
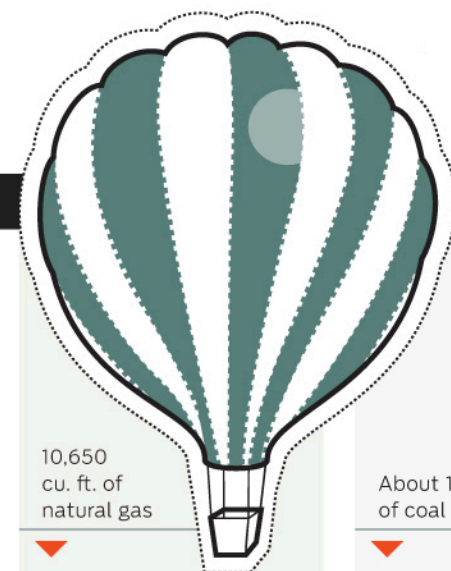
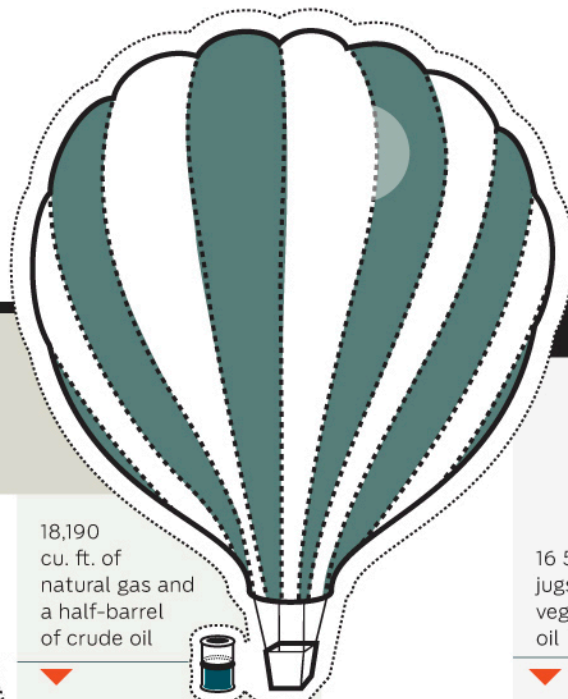


THE GREAT ALT-FUEL RALLY

It takes five barrels of crude oil to produce enough gasoline (nearly 97 gal.) to power a Honda Civic from New York to California. So how do the alternative fuels that may gradually reduce America's dependence on foreign oil stack up against the mileage and convenience of the filling-station stalwart? Here's a reality check.



RAW MATERIALS CONSUMED


4.5 barrels of crude oil




53 bushels of corn and a half-barrel of crude oil



18,190 cu. ft. of natural gas and a half-barrel of crude oil



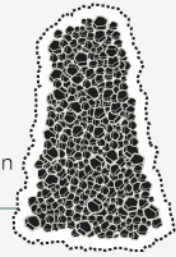
16 5-gal. jugs of used vegetable oil



10,650 cu. ft. of natural gas



About 1 ton of coal



16,000 cu. ft. of hydrogen



FUEL NEEDED

90.9 GAL

176 GAL

214 GAL

68.2 GAL

88 GGE*

16.4 GGE

73 GGE

FUEL COST

\$212.70

\$425

\$619

\$231

\$110

\$60

\$804

PRICE

\$2.34/GAL

\$2.41/GAL

\$2.89/GAL

\$3.40/GAL

\$1.25/GGE

\$3.66/GGE

\$11/GGE

ECONOMY

33 MPG

17 MPG

14 MPG

44 MPG

34 MPGGE

202 MPGGE

41 MPGGE

* Gallon of Gasoline Equivalent

Gasoline

HONDA CIVIC is the benchmark for all the vehicles in our virtual comparison. It burns regular 87-octane gasoline (available on every corner)—even if it's not always cheap.



2006 HONDA CIVIC

E85/Ethanol

CURRENT TAURUS FFV burns 85% ethanol and 15% gasoline. (The gas gets the engine started on cold days.) This mix provides about 15% less mileage than straight gasoline, but burns cleanly and reduces pollution.



2005 TAURUS FFV

M85/Methanol

MID-'90s TAURUS FFV ran on M85 sold in California in a limited number of stations, and also to some dedicated fleets. Low BTU content of methanol means 35% fewer miles per gallon. Made from natural gas, methanol burns cleanly.



1998 TAURUS M85 FFV

B100 Biodiesel

VW GOLF AND NEW BEETLE TDI are the mileage champs of all conventional cars, sipping diesel fuel at a miserly rate. (And they can burn B100, although VW only recommends B5.) B20 would lower the cost of the trip to less than \$183.



2006 GOLF TDI

Compressed Natural Gas

HONDA CIVIC GX can be refueled at home—as could any CNG vehicle—with a home compressor. But crossing the country in a dedicated CNG car would be tough: There aren't a lot of CNG stations, and many are for fleet use only.



2005 CIVIC GX

Electricity

LATE-'90s HONDA EV PLUS got about 100 highway miles on a nearly full charge of 20 kilowatt-hours (kwh). The vehicle's NiMH battery pack had a total capacity of 26.5 kwh. Electrics do better in traffic, thanks to regenerative braking.



1997 HONDA EV PLUS

Hydrogen Fuel Cell

HY-WIRE CONCEPT uses compressed hydrogen, which costs about four times as much as gasoline, although the DOE projects prices below \$2/GGE by 2012. New technology will double vehicle range by raising tank pressure to 10,000 psi.



GM HY-WIRE