HYBRID-ELECTRIC VEHICLES

It's no accident the most fuel-efficient vehicles in some classes for the 2005 model year are hybrid-electric vehicles (HEVs). Hybrids can be configured in many different ways to achieve a variety of different objectives. They combine the best features of the internal combustion engine with an electric motor and can significantly improve fuel economy without sacrificing performance or driving range. HEVs may also be configured to provide electrical power to auxiliary loads such as power tools.

HEVs are primarily propelled by an internal combustion engine, just like conventional vehicles. However, they also convert energy normally wasted during coasting and braking into electricity, which is stored in a battery until needed by the electric motor. The electric motor is used to assist the engine when accelerating or hill climbing and in low-speed driving conditions where internal combustion engines are least efficient. Unlike all-electric vehicles, HEVs now being offered do not need to be plugged into an external source of electricity to be recharged; conventional gasoline and regenerative braking provide all the energy the vehicle needs.

Potential buyers should also be aware that the federal government is currently offering tax incentives for HEVs and other alternative fuel vehicles. Some states also offer incentives.

Additional information on HEVs, including tax incentives, can be found at www.fueleconomy.gov/feg/hybrid_sbs.shtml. Annual fuel cost is estimated assuming 15,000 miles of travel each year (55% city and 45% highway) and a gasoline fuel cost of $1.80 per gallon (regular unleaded).

	Trans Type / Speeds	Eng Size / Cylinders	MPG City / Hwy	Annual Fuel Cost	Battery Size / Type
TWO SEATERS					
HONDA					
Insight	AV	1.0/3	57/56	$483	144 V, Ni-MH
	M5	1.0/3	61/66	$429	144 V, Ni-MH
COMPACT CARS					
HONDA					
Civic Hybrid (LB)	AV	1.3/4	48/47	$562	144 V, Ni-MH
Civic Hybrid	AV	1.3/4	47/48	$575	144 V, Ni-MH
Civic Hybrid (LB)	M5	1.3/4	46/51	$562	144 V, Ni-MH
Civic Hybrid	M5	1.3/4	45/51	$575	144 V, Ni-MH
MIDSIZE CARS					
HONDA					
Accord Hybrid	A5	3.0/6	29/37	$842	
TOYOTA					
Prius	AV	1.5/4	60/51	$491	202 V, Ni-MH
STANDARD PICKUP TRUCKS 2WD					
CHEVROLET					
C15 Silverado Hybrid 2WD	A4	5.3/8	18/21	$1,420	Lead Acid
GMC					
C15 Sierra Hybrid 2WD	A4	5.3/8	18/21	$1,420	Lead Acid

	Trans Type / Speeds	Eng Size / Cylinders	MPG City / Hwy	Annual Fuel Cost	Battery Size / Type
STANDARD PICKUP TRUCKS 4WD					
CHEVROLET					
K15 Silverado Hybrid 4WD	A4	5.3/8	17/19	$1,501	Lead Acid
GMC					
K15 Sierra Hybrid 4WD	A4	5.3/8	17/19	$1,501	Lead Acid
SPORT UTILITY VEHICLES 2WD					
FORD					
Escape HEV 2WD	AV	2.3/4	36/31	$818	330 V, Ni-MH
SPORT UTILITY VEHICLES 4WD					
FORD					
Escape HEV 4WD	AV	2.3/4	33/29	$872	330 V, Ni-MH

ABBREVIATIONS:

A ..... Automatic Transmission
A-S ..... Automatic Transmission-Select Shift
AV ..... Continuously Variable Transmission
City ..... MPG on City Test Procedure
CNG ..... Compressed Natural Gas
Conv ..... Convertible
E85 ..... 85% Ethanol/15% Gasoline
Eng Size .. Engine Volume in Liters
FFV ..... Flexible Fuel Vehicle
Hwy ..... MPG on Highway Test Procedure
LB ..... Lean Burn Fuel System
M ..... Manual Transmission
NA ..... Not Available at Press Time
Ni-MH ..... Nickel-metal hydride
T ..... Turbocharger
Trans ..... Transmission
V ..... Volts

ETHANOL FLEXIBLE-FUEL VEHICLES

This section contains the driving range and fuel economy values for ethanol flexible-fuel passenger cars and light trucks. Ethanol flexible-fuel vehicles are designed to operate on gasoline, E85 (a mixture of 85% ethanol and 15% gasoline), or any mixture of the two fuels. Annual fuel cost is estimated assuming 15,000 miles of travel each year (55% city and 45% highway) and an average fuel cost of $1.65 per gallon of E85, $1.80 per gallon of regular unleaded gasoline, and $1.95 per gallon of premium unleaded gasoline.

The driving range and fuel economy values are shown for both gasoline and E85. When operating your FFV on mixtures of gasoline and E85, such as when alternating between using these fuels, your driving range and fuel economy values will be somewhere between those listed for the two fuels, depending on the actual percentage of gasoline and E85 in the tank.

	Trans Type / Speeds	Eng Size / Cylinders	MPG City / Hwy	Annual Fuel Cost	Fuel	Range (miles)
COMPACT CARS						
CHRYSLER						
Sebring Conv	A-4	2.7/6	15/20	$1,455	E85	270
			21/28	$1,174	Gas	390
Sebring Conv (2-Mode)	A-4	2.7/6	15/20	$1,455	E85	270
			21/28	$1,174	Gas	390
MERCEDES-BENZ						
C240 FFV	A-5	2.6/6	14/19	$1,547	E85	310
			20/25	$1,331	P	420
C320 FFV	A-5	3.2/6	14/19	$1,547	E85	310
			20/26	$1,331	P	430
C320 Sports Coupe FFV	A-5	3.2/6	14/18	$1,651	E85	300
			19/24	$1,392	P	400
MIDSIZE CARS						
CHRYSLER						
Sebring 4-dr	A-4	2.7/6	15/20	$1,455	E85	270
			21/28	$1,174	Gas	390
Sebring 4-dr (2-Mode)	A-4	2.7/6	15/20	$1,455	E85	270
			21/28	$1,174	Gas	390
DODGE						
Stratus 4-dr	A-4	2.7/6	15/20	$1,455	E85	270
			21/28	$1,174	Gas	390
Stratus 4-dr (2-Mode)	A-4	2.7/6	15/20	$1,455	E85	270
			21/28	$1,174	Gas	390
MERCURY						
Sable	A-4	3.0/6	15/20	$1,455	E85	310
			19/27	$1,228	Gas	390
LARGE CARS						
FORD						
Taurus	A-4	3.0/6	15/20	$1,455	E85	310
			19/27	$1,228	Gas	390
MIDSIZE STATION WAGONS						
FORD						
Taurus Wagon	A-4	3.0/6	14/19	$1,547	E85	290
			19/26	$1,285	Gas	380
MERCURY						
Sable Wagon	A-4	3.0/6	14/19	$1,547	E85	290
			19/26	$1,285	Gas	380
SMALL STATION WAGONS						
MERCEDES-BENZ						
C240 Wagon FFV	A-5	2.6/6	14/19	$1,547	E85	310
			20/25	$1,331	P	420
SPORT UTILITY VEHICLES 2WD						
CHEVROLET						
C1500 Avalanche 2WD	A-4	5.3/8	11/14	$2,062	E85	310/540*
			14/19	$1,688	Gas	410/690*
C1500 Suburban 2WD	A-4	5.3/8	11/15	$1,903	E85	310/540*
			15/19	$1,588	Gas	410/690*
C1500 Tahoe 2WD	A-4	5.3/8	11/15	$1,903	E85	310/540*
			15/19	$1,588	Gas	410/690*
FORD						
Explorer 2WD FFV	A-5	4.0/6	11/15	$1,903	E85	290
			15/20	$1,588	Gas	380
GMC						
C1500 Yukon 2WD	A-4	5.3/8	11/15	$1,903	E85	310/540*
			15/19	$1,588	Gas	410/690*
C1500 Yukon XL 2WD	A-4	5.3/8	11/14	$2,062	E85	310/540*
			14/19	$1,688	Gas	410/690*
MERCURY						
Mountaineer 2WD	A-5	4.0/6	11/15	$1,903	E85	290
			15/20	$1,588	Gas	380
MINIVANS 2WD						
CHRYSLER						
Town & Country 2WD	A-4	3.3/6	13/17	$1,651	E85	300
			18/25	$1,285	Gas	420
DODGE						
Caravan	A-4	3.3/6	13/17	$1,651	E85	300
			18/25	$1,285	Gas	420
SPORT UTILITY VEHICLES 4WD						
CHEVROLET						
K1500 Avalanche 4WD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
K1500 Suburban 4WD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
K1500 Suburban AWD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
K1500 Tahoe 4WD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
K1500 Tahoe AWD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
FORD						
Explorer 4WD FFV	A-5	4.0/6	11/15	$2,062	E85	290
			14/20	$1,688	Gas	380
GMC						
K1500 Yukon 4WD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
K1500 Yukon AWD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
K1500 Yukon XL 4WD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
K1500 Yukon XL AWD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			14/18	$1,688	Gas	410/620*
MERCURY						
Mountaineer 4WD FFV	A-5	4.0/6	10/14	$2,062	E85	270
			14/19	$1,688	Gas	360
STANDARD PICKUP TRUCKS 2WD						
CHEVROLET						
C1500 Silverado 2WD	A-4	5.3/8	12/16	$1,767	E85	310/540*
			16/20	$1,501	Gas	410/690*
DODGE						
Ram 1500 2WD	A-5	4.7/8	9/11	$2,475	E85	260
			12/15	$2,076	Gas	340

	Trans Type / Speeds	Eng Size / Cylinders	MPG City / Hwy	Annual Fuel Cost	Fuel	Range (miles)
FORD						
Explorer Sport Trac 2WD FFV	A-5	4.0/6	11/15	$1,903	E85	290
			15/20	$1,588	Gas	380
GMC						
C1500 Sierra 2WD	A-4	5.3/8	12/16	$1,767	E85	310/540*
			16/20	$1,501	Gas	410/690*
NISSAN						
Titan 2WD	A-5	5.6/8	10/14	$2,062	E85	310/330
	A-5	5.6/8	14/19	$1,688	Gas	420/450
STANDARD PICKUP TRUCKS 4WD						
CHEVROLET						
K1500 Silverado 4WD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			15/18	$1,688	Gas	410/620*
DODGE						
Ram 1500 4WD	A-5	4.7/8	9/11	$2,475	E85	260
			12/15	$2,076	Gas	340
FORD						
Explorer Sport Trac 4WD FFV	A-5	4.0/6	11/15	$2,062	E85	290
			14/20	$1,688	Gas	380
GMC						
K1500 Sierra 4WD	A-4	5.3/8	11/14	$2,062	E85	310/460*
			15/18	$1,688	Gas	410/620*
NISSAN						
Titan 4WD	A-5	5.6/8	10/13	$2,250	E85	310/330*
	A-5	5.6/8	14/18	$1,801	Gas	420/450*

* Vehicle is available with various tank sizes. Driving ranges are shown for the smallest and largest available fuel tanks.

DIESEL VEHICLES

This section contains fuel economy values for diesel-fueled vehicles. Diesel fuel contains approximately 10% more energy per gallon than gasoline. In addition, diesel engines have higher compression ratios, run “lean,” and are unthrottled, giving them a substantial fuel economy advantage over gasoline engines. Annual fuel cost is estimated assuming 15,000 miles of travel each year (55% city and 45% highway) and a diesel fuel cost of $1.55 per gallon.

	Trans Type / Speeds	Eng Size / Cylinders	MPG City / Hwy	Annual Fuel Cost	Notes / Abbreviations
SUBCOMPACT CARS					
VOLKSWAGEN					
New Beetle	M-5	1.9/4	38/46	$567	T
	A-S6	1.9/4	35/42	$611	T
COMPACT CARS					
VOLKSWAGEN					
Golf	M-5	1.9/4	38/46	$567	T
	A-S5	1.9/4	32/43	$646	T
Jetta	M-5	1.9/4	38/46	$567	T
	A-S5	1.9/4	32/43	$646	T
	A-S6	1.9/4	35/42	$611	T
MIDSIZE CARS					
MERCEDES-BENZ					
E320 CDI	A-5	3.2/6	27/37	$774	T
VOLKSWAGEN					
Passat	A-S5	2.0/4	27/38	$751	T
SMALL STATION WAGONS					
VOLKSWAGEN					
Jetta Wagon	M-5	1.9/4	36/43	$595	T
	A-S5	1.9/4	32/43	$646	T
MIDSIZE STATION WAGONS					
VOLKSWAGEN					
Passat Wagon	A-S5	2.0/4	27/38	$751	T
SPORT UTILITY VEHICLES 4WD					
JEEP					
Liberty	A-4	2.8/4	NA	NA	T
Liberty/Cherokee 4WD	A-5	2.8/4	21/26	$1,011	

ABBREVIATIONS:

A ..... Automatic Transmission
A-S ..... Automatic Transmission-Select Shift
AV ..... Continuously Variable Transmission
City ..... MPG on City Test Procedure
CNG ..... Compressed Natural Gas
Conv ..... Convertible
E85 ..... 85% Ethanol/15% Gasoline
Eng Size .. Engine Volume in Liters
FFV ..... Flexible Fuel Vehicle
Hwy ..... MPG on Highway Test Procedure
LB ..... Lean Burn Fuel System
M ..... Manual Transmission
NA ..... Not Available at Press Time
Ni-MH ..... Nickel-metal hydride
T ..... Turbocharger
Trans ..... Transmission
V ..... Volts

COMPRESSED NATURAL GAS VEHICLES

This section supplies the driving range and fuel economy values for vehicles that operate on compressed natural gas (CNG). CNG fuel is normally dispensed in "equivalent gallons," where one equivalent gallon is equal to 121.5 cubic feet of CNG. Therefore, the fuel economy values are shown in miles per gallon-equivalent. Annual fuel cost estimates are based on an average fuel price of $1.05 per gasoline equivalent gallon of CNG.

The driving range is shown in miles and represents the distance the vehicle can travel on a full tank (or tanks) of fuel during combined city and highway driving (55% city and 45% highway).

	Trans Type / Speeds	Engine Size / Cylinders	MPG City/Hwy	Annual Fuel Cost	Fuel	Range
COMPACT CARS						
HONDA						
Civic	A V	1.7/4	30/34	$491	CNG	200
STANDARD PICKUP TRUCKS 2WD						
CHEVROLET						
C2500 HD Silverado 2WD	A-4	6.0/8	9/12	$1,575	CNG	180
GMC						
C2500 HD Sierra 2WD	A-4	6.0/8	9/12	$1,575	CNG	180
STANDARD PICKUP TRUCKS 4WD						
CHEVROLET						
K2500 HD Silverado 4WD	A-4	6.0/8	9/12	$1,575	CNG	180
GMC						
K2500 HD Sierra 4WD	A-4	6.0/8	9/12	$1,575	CNG	180

ABBREVIATIONS:

A ..... Automatic Transmission
A-S ..... Automatic Transmission-Select Shift
AV ..... Continuously Variable Transmission
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CNG ..... Compressed Natural Gas
Conv ..... Convertible
E85 ..... 85% Ethanol/15% Gasoline
Eng Size .. Engine Volume in Liters
FFV ..... Flexible Fuel Vehicle
Hwy ..... MPG on Highway Test Procedure
LB ..... Lean Burn Fuel System
M ..... Manual Transmission
NA ..... Not Available at Press Time
Ni-MH ..... Nickel-metal hydride
T ..... Turbocharger
Trans ..... Transmission
V ..... Volts

FUEL CELL VEHICLES

Advanced Transportation Technology

Although fuel cell vehicles (FCVs) are not expected to reach the mass market for at least a decade, a limited number will be available for sale or lease in 2004-2005 to demonstration fleets in parts of the country with a readily accessible hydrogen supply.

FCVs represent a radical departure from conventional vehicles with internal combustion engines. They use emerging technology with the potential to reduce harmful emissions substantially, as well as energy use and our dependence on foreign oil.

FCVs are propelled by electric motors powered by fuel cells, which produce electricity from the chemical energy of hydrogen. They are more efficient than conventional vehicles, and the only by-product of a hydrogen fuel cell is water. FCVs may also incorporate other advanced automotive technologies to increase efficiency.

The Challenges Ahead

Much work remains before FCVs can be mass-marketed and sold at local dealerships. Significant research and development is required to reduce costs and improve performance in areas such as driving range, cold-weather operation, and durability. A new refueling infrastructure may also be required to make hydrogen fuel widely available to consumers.

Automakers, fuel cell and component developers, government agencies, and others are working hard to accelerate the introduction of FCVs. In fact, partnerships such as the DOE-led FreedomCAR Initiative and the California Fuel Cell Partnership have been formed to encourage private companies and government agencies to work together to prove this technology's viability and move FCVs toward widespread commercialization. For more information about FCVs and links to fuel cell websites, please visit www.fueleconomy.gov/feg/fuelcell.shtml.

	Motor	Energy Storage Device	Fuel	Miles per kilogram (City/Hwy)	Range (mi)
SUBCOMPACT					
HONDA					
FCX	80 kW DC* Brushless	9.2 Farad Ultra Capacitor	Hydrogen	62/51	190
COMPACT					
FORD					
Focus, 2WD	65 kW AC*	Ni-MH Battery*	Hydrogen	NA**	NA**

* kw = kilowatts; DC = direct current; AC = alternating current; Ni-MH = nickel metal hydride

** The fuel economy values and driving range were not available at press time. See www.fueleconomy.gov for updated information.

SAMPLE FUEL ECONOMY LABEL

(Attached to New Vehicle Window)

Use these two estimates to compare to other models.

This is the average estimate for city driving.

This is the average estimate for highway driving.

Compare this vehicle to others by using the FREE FUEL ECONOMY GUIDE available in the dealer showroom

CITY MPG 24

HIGHWAY MPG 31

These numbers represent a range of fuel economy that most drivers achieve with this particular model.

Actual Mileage will vary with options, driving conditions, driving habits and vehicle's condition. Results reported to EPA indicate that the majority of vehicles with these estimates will achieve between

20 and 28 mpg in the city

and between

26 and 36 mpg on the highway.

2005 GREEN CAR 2WD, 4 CYL, 2.0 LITER, MULTIPOINT FUEL INJECTION, 4-SPEED AUTO TRANS, CATALYST.

Estimated Annual Fuel Cost: $999

These numbers represent the range of fuel economy for other models of this size class.

For Comparison Shopping
All vehicles classified as COMPACT CARS have been issued mileage ratings ranging from

13 to 48 mpg city

and

19 to 51 mpg highway.

This fuel cost is based on 15,000 miles/yr at $1.80 per gallon for regular unleaded and $1.95 for premium.

See www.fueleconomy.gov

Check the fuel economy label on the vehicle at the dealer showroom for its specific fuel economy (mpg) ratings. The ratings may vary slightly from the values in this guide because of engine and fuel system differences not listed here.