



TAX INCENTIVES FOR HYBRID VEHICLES

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A recently enacted federal tax incentive, combined with an existing state tax incentive and higher gas prices, make purchasing a hybrid vehicle more economical. In many cases, the federal and state incentives may make a hybrid vehicle less expensive overall than a comparable non-hybrid vehicle. This *Issue Brief* describes the federal and state tax incentives and provides information on the potential consumer savings associated with the purchase of a hybrid vehicle.¹

Hybrid Vehicles

Hybrid vehicles use both gasoline and a rechargeable electric motor as energy sources. The vehicles are generally more fuel efficient and produce less emissions than standard gasoline-powered vehicles. Some hybrid vehicles can get over 60 miles per gallon. However, the fuel efficiency of other hybrids may not significantly differ from comparable non-hybrids. Industry analysts indicate that hybrid vehicles make up about one percent of total U.S. vehicle sales, and they could reach five percent of sales by 2010. Hybrid vehicles generally sell for \$3,000 to \$5,000 more than comparable non-hybrid vehicles.

¹ The federal government also recently created tax credits for other alternative fuel vehicles, such as natural gas, advanced-lean burn, mixed-fuel, and fuel cell vehicles. This *Issue Brief* only pertains to hybrid passenger cars and light trucks weighing under 8,500 pounds as they represent the majority of passenger vehicles available in the marketplace. A different credit is also available for heavier hybrid vehicles based on the differential cost of the vehicle.

Tax Incentives

Federal tax incentive. The federal *Energy Tax Incentives Act of 2005* provided an income tax credit up to \$3,400 for the purchase or lease of a new hybrid vehicle first used after January 1, 2006. A tax credit offsets taxes owed on a dollar-for-dollar basis. The new federal tax credit is determined by two components. The first component is based on fuel efficiency and ranges from \$400 to \$2,400. The second component of the credit is based on fuel savings over the vehicle's lifetime (120,000 miles) and ranges from \$250 to \$1,000.

The Internal Revenue Service and vehicle manufacturers have yet to determine the credit amounts for qualifying hybrid vehicles. However, most hybrid vehicles are estimated to qualify for at least a \$1,000 credit. The Toyota Prius is estimated to qualify for the largest credit amount at this time (\$3,150). Hybrid vehicles must meet certain emissions and hybrid technology requirements to qualify for the credit.

Claiming the federal credit. Both individuals and businesses can claim the tax credit. The credit for individuals is applied to the individual's income tax owed after other credits are claimed and cannot exceed taxes owed in a given year or be used to reduce the amount of future taxes owed. Individuals subject to the alternative minimum tax will likely not be able to benefit from the credit. Businesses can apply any unused hybrid vehicle tax credit to taxes owed in a limited number of previous or subsequent tax years.

Phaseout. The federal credit is phased out for manufacturers that sell more than 60,000 qualifying

vehicles.² It is important to note that manufacturers of popular hybrid vehicles, such as Toyota and Honda, could reach their limit in 2006 or 2007. Thus, the federal credit amount for these manufacturers' hybrid vehicles could begin to be reduced in the last part of 2006 or in 2007 and be unavailable by the end of 2007 or in 2008. The credit is repealed for all hybrid vehicles purchased after December 31, 2010.

State tax incentive. The state also offers an income tax credit for the purchase or lease of hybrid vehicles. To qualify, the vehicle must be titled and registered in Colorado. The state credit is worth a portion of the additional cost of the hybrid vehicle compared to the cost of a similar non-hybrid vehicle.

The credit amount depends on the emissions level of the vehicle and the year in which the purchase is made. Consumers with lower emitting vehicles can claim a higher percentage of the differential cost of their hybrid vehicle as a credit. For example, the credit amount for a 2006 Honda Civic Hybrid certified as an *ultra-low emitting vehicle* purchased in 2006 is 75 percent of the differential cost of the vehicle. The credit amount for a hybrid 2006 Toyota Prius certified as a *super-low emitting vehicle* is 85 percent of the differential cost. The credit is reduced beginning in 2010 and is repealed after 2011.

Like the federal credit, the state credit cannot exceed taxes owed in a given year. However, any unused state credit can be applied to future taxes owed for up to five years until fully utilized. About 1,500 individual taxpayers claimed roughly \$2.2 million in state hybrid vehicle tax credits in FY 2004-05.

Potential Consumer Savings

Table 1 shows the potential consumer savings associated with the purchase of a hybrid vehicle compared to a similar non-hybrid vehicle using two hybrid vehicles as examples. The table shows the prices of the vehicles, the estimated amount of the tax credits

² The limit on the number of vehicles sold includes sales of advanced lean-burn vehicles.

available for the hybrid vehicles, and the estimated gas savings associated with driving the vehicles.

Insurance and maintenance costs are not included in the analysis. These costs, at least in the first few years, are similar to non-hybrid vehicles according to industry analysts. However, it is difficult to determine maintenance costs as hybrid vehicles age because the vehicles are still relatively new. The first model came out in 1999. It is important to note that hybrid vehicle batteries may be costly to replace after their warranty expires – usually after eight years or \$100,000 miles. Also, insurance costs may change as new information on the maintenance and repair costs of hybrid vehicles becomes available.

Table 1: Potential Consumer Savings

	2006 Toyota Prius	2006 Honda Civic Hybrid
Price	\$21,725	\$21,850
Price of Comparable Non-Hybrid	\$17,860	\$18,475
Price Difference	\$3,865	\$3,375
Estimated Federal Tax Credit	(\$3,150)	(\$2,100)
Estimated State Tax Credit	(\$3,285)	(\$2,531)
Total Credits ³	(\$6,435)	(\$4,631)
Net Price Difference After Credits	(\$2,570)	(\$1,256)
Estimated 1 st Year Gas Savings ⁴	(\$541)	(\$315)
1 st Year Potential Savings Due to Credits and Gas Savings	\$3,111	\$1,571
Potential Savings over 5 Years Due to Credits and Gas Savings ⁴	\$5,443	\$2,926

Source: Colorado Department of Revenue, Environmental Protection Agency, Edmunds.com, and The American Council for an Energy Efficient Economy.

³ Some consumers may not be able to claim the full credit amounts depending on their tax liability and whether they claim other tax credits. The credits can only be claimed once for a particular vehicle.

⁴ Compared to a similar non-hybrid vehicle. Calculated using the EPA's *Fuel Economy Guide* (which generally estimates fuel economy higher than actual fuel economy). Assumes gasoline costs \$2.20 per gallon in 2006, increasing 3 percent per year, and 15,000 miles per year of driving (55 percent city/45 percent highway).