

Delta Gamma Well Aware

Encompasses eight dimensions: Social, Spiritual, Physical, Emotional, Vocational, Intellectual, Financial and Leadership Development



Hybrid Vehicles - What's What??

Appealing to our environmental consciousness, hybrid vehicles are currently all the rage. If you are interested in energy conservation and want to learn more about these automobiles, there is plenty of information to sort through. Here are a few tips on what's what when it comes to hybrids.

How do they Work?

- Hybrid-electric vehicles (HEVs) combine the benefits of gasoline engines and electric motors.
- *Regenerative Braking* uses the electric motor to apply resistance to the drivetrain causing the wheels to slow down. In return, the energy from the wheels turns the motor, which functions as a generator, converting energy normally wasted during coasting and braking into electricity, which is stored in a battery until needed by the electric motor.
- Unlike all-electric vehicles, HEVs 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.
- *Electric Motor Drive/Assist* uses the electric motor to provide additional power to assist the engine in accelerating, passing or hill climbing. This allows a smaller, more efficient engine to be used.
- *Automatic Start/Shutoff* works by automatically shutting off the engine when the vehicle comes to a stop and restarting it when the accelerator is pressed. This prevents wasted energy from idling.

Comparing Popular Hybrid Vehicles

2006-2007 Hybrid Cars

	Honda Accord Hybrid	Honda Civic Hybrid	Honda Insight	Lexus GS 450h	Toyota Camry Hybrid	Toyota Prius
Starting Cost	\$22,550	\$21,850	\$19,330	\$55,595	\$25,900	\$21,725
MPG	25 city, 34 hwy	49 city, 51 hwy	57 city, 56 hwy	25 city, 28 hwy	40 city, 38 hwy	60 city, 51 hwy
Cost of a Fill Up	\$35.55	\$25.57	\$22.04	\$39.16	\$35.76	\$24.74
Annual Green House Gas Emissions**	6.6 tons	3.7 tons	3.3 tons	7.0 tons	4.8 tons	3.4 tons

** On a scale from 14.9 to 2.9, with 14.9 being the worst and 2.9 being the best

2006-2007 Hybrid SUVs

	Ford Escape Hybrid	Lexus RX 400h	Saturn Vue Hybrid	Mercury Mariner Hybrid	Toyota Highlander Hybrid
Starting Cost	\$27,260	\$44,660	\$22,995	\$27,950	\$33,030
MPG	36 city, 31 hwy	33 city, 28 hwy	27 city, 32 hwy	32 city, 29 hwy	33 city, 28 hwy
Cost of a Fill Up	\$31.19	\$35.76	\$33.26	n/a	\$39.71
Annual Green House Gas Emissions**	5.4 tons	6.0 tons	6.4 tons	6.0 tons	6.0 tons

** On a scale from 14.9 to 2.9, with 14.9 being the worst and 2.9 being the best

Is the Cost Worth it?

- Back in 2002 the IRS gave hybrid owners a \$2,000 tax break on new purchases.
- That tax incentive started shrinking and according to the IRS, the \$2,000 deduction was cut by 25% in 2004, 50% in 2005 and 75% in 2006. It will be phased out entirely by 2007.
- Compared with economy car counterparts, hybrids cost anywhere from 25% to 30% more at the dealership.
- Not including the tax break, it would take 21.5 years in gas savings to pay back the extra money initially laid out for the hybrid.
- There is concern about the longevity of the hybrids' nickel-metal hydride battery packs that store the electric power onboard.
- The batteries typically are warranted for eight years/100,000 miles, but some people who keep their vehicles for longer periods worry that a replacement battery pack might cost \$2,000 or more.
- Hybrids will depreciate faster than other models because the technology is improving every year. It is unlikely in the used-car market that someone will want to purchase a hybrid with early technology when they could have a newer model, which handles better, has more power and gets much better mileage.

Wellness Resources

United States Department of Energy, www.fueleconomy.gov

MSN Autos, <http://autos.msn.com/advice/article.aspx?contentid=4023397>

Smart Money, www.smartmoney.com

Please reference for additional information. If you click on either of these links for more information, you will enter a non-Delta Gamma supported Web site. The material on the third party site is not endorsed by Delta Gamma nor does Delta Gamma verify the accuracy of the material. Please observe that you are entering another site that is solely provided as a vehicle to find additional information on a topic. Delta Gamma does not endorse any commercial products that may be advertised or sold on these sites.

For presentation ideas and additional information on wellness topics visit http://www.deltagamma.org/personal_growth.shtml. If you have any questions, suggestions, or comments, please e-mail wellaware@deltagamma.org. Wellness e-mails can be accessed online at http://www.deltagamma.org/wellness_emails.shtml

The information in this e-mail should not be considered complete or be used in place of a call or visit to a professional. The information is not intended as professional advice.

The views and opinions of the authors and contributors expressed in this wellness e-mail do not necessarily state or reflect those of the Delta Gamma Foundation or Fraternity, and they may not be used for advertising or endorsement purposes.

∞ Brought to you by the Delta Gamma Foundation ∞