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Cleaner Cars, Smarter Choices

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Environmentally aware drivers have never had so many choices. More manufacturers are offering hybrid vehicles, which are equipped with both a gasoline-fueled internal-combustion engine and an electric motor. Hybrids deliver better mileage and cleaner emissions with no loss of performance. It can't be said often enough: Hybrid cars do not need to be plugged in.



Also very clean, although not necessarily more fuel-efficient, are the Partial Zero Emission Vehicles (PZEVs) now available in many states. Meanwhile, General Motors and other companies claim they will have developed marketready fuel-cell cars by 2010. But most experts believe the end-of-decade target for these hydrogen vehicles is highly unrealistic. For now, here's a roundup of the cleaner cars on the market or scheduled to arrive soon.



Hybrids, Available Now

- **Ford Escape Hybrid** - The Escape, which debuted in 2004, uses some of the Toyota Prius technology in an SUV package. Four wheel-drive is an available option for about \$2,000.
- **Honda Accord Hybrid** - The 2005 Accord produces 255 horsepower, 15 more than the standard V-6 Accord. Under light loads, the Accord Hybrid shuts off its electric motor and three of its six cylinders.
- **Honda Civic Hybrid** - For tighter budgets the smaller 2005 Civic Hybrid offers an 85-horsepower four-cylinder engine and 13-horsepower electric motor. It's also rated PZEV for low emissions.
- **Honda Insight Hybrid** - This spartan two-seater remains in the Honda lineup, but may be gone soon.
- **Toyota Prius** - The 2005 model offers more interior space than the Toyota Camry and is a relative bargain. Critics agree it is much improved from the first-generation Prius, with more power and better styling, and the price hasn't changed. Toyota expected to sell 100,000 worldwide in the last year.

The Honda Accord (top) and Ford Escape (bottom), two examples of how hybrid technology is finding its way into more and more car classes.

Hybrids, Available Soon

- **Lexus RX400h** - This luxury super-low emission hybrid SUV will be on the market in April. It combines 270 horsepower (more than the standard Lexus RX330 SUV) and excellent fuel economy. A substantially similar, but more affordable, SUV, the **Toyota Highlander**, will also be available.
- **Nissan Altima** - The mid-sized Altima sedan, coming out in 2006, will use some components from the Prius's hybrid drive.
- **General Motors** plans to offer hybrid versions of the **Saturn Vue** and **Chevy Malibu** in 2006 and 2008, respectively. These so-called "mild" hybrids will use a modest belt-alternator system to shut off the engine at idle and cut off fuel during deceleration, improving fuel economy by an estimated 12%. "Full hybrid" versions of the **GMC Yukon** and **Chevrolet Yukon**, with a projected 30% improvement in fuel economy, will arrive in 2007.

Partial-Zero Emission Vehicles

Partial-Zero Emission Vehicles (PZEVs) have zero evaporate emissions (fuel evaporating from the carburetor or fuel system) and 90% lower emissions of other types than the average new car. They are available in California and the states that follow California's rules: CT, MA, ME, NJ, NY and VT. There are already 140,000 PZEVs, representing 27 different car models, on California roads. They use sophisticated engine controls and advanced catalytic converters, but add less than \$200 to the customer's bottom line. One example is the \$13,455 **Ford Focus PZEV** (25 mpg city/33 mpg highway), which produces 97% fewer hydrocarbons and nitrogen oxides and 76% less carbon monoxide compared to a typical automobile.

Hybrid Choices at a Glance				
Model	City Highway		Base price	Available
	mpg	mpg		
Ford Escape Hybrid	36	31	\$26,970	Now
Honda Accord Hybrid	30	37	\$30,000	Now
Honda Civic Hybrid	45	51	\$19,800	Now
Honda Insight Hybrid	61	66	\$21,380	Now
Toyota Prius	60	51	\$20,510	Now
Toyota Highlander	30	26	\$35,000 est.	June '05
Lexus RX 400h	30	26	\$40,000 est.	April '05
Nissan Altima	40 est.	--	\$25,000	Summer '06
Saturn Vue	N/A	N/A	N/A	2006
GMC/Chevy Yukon	N/A	N/A	N/A	2007

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A complete consumer guide to all types of cleaner cars, including Partial Zero Emission Vehicles, is at www.driveclean.ca.gov. Two web sites, hybridcars.about.com and <http://www.hybridcars.com/>, offer detailed information on hybrids. Federal government fuel efficiency ratings are at <http://www.fueleconomy.gov/>.