Hybrid cars essay sample



Driving one of the new high-tech hybrids — cars that combine the power of a gas engine with an electric motor to reduce fuel consumption and emissions — may seem like something only an environmentalist or an engineer could get revved up about. The fact is, however, that a new generation of hybrid cars and trucks due to go on sale within the next 12 months offer a number of very practical advantages for families, from saving money to helping save the planet. Many experts are predicting 2004 will be the year that hybrids turn the corner from eco-friendly novelty to mainstream transportation.

There's never been a better time to consider a switch to one of these green, clean, gas-saving machines. Here, eight reasons a hybrid may be perfect for your family. 1. They're as comfortable to drive as conventional cars.

There's no difference between a hybrid and the gas-powered car parked in your garage — it can accelerate just as quickly and cruise just as fast on the highway, and it handles just as smoothly. Most important, hybrids are just as safe to drive. Well, there is one difference: Hybrids are super-quiet — sometimes you can't tell whether the engine is running or not! When power is not needed — at a red light, say, or in bumper-to-bumper traffic — the engine completely shuts down and revs up again when you press on the accelerator, meaning you don't waste gas or emit toxins.

Hybrids run on a rechargeable battery and gasoline rather than gas alone, but the power shift between the gas engine and electric motor is so seamless that you're likely to forget about all the advanced technology moving you down the road. And there's no need to plug them in as you would with an all-electric car; the electric motor also acts as a generator

during deceleration and braking to continually recharge the batteries as you drive. 2. You're sure to find a model that fits your family's lifestyle.

Currently, there are three popular hybrids on the market: Honda's compact two-seat Insight coupe, along with the midsize Toyota Prius four-door hatchback and the Honda Civic hybrid sedan, both of which seat five. But with half a dozen new hybrid models on their way, larger families will soon have more good choices. Look for everything from midsize family cars like the Honda Accord hybrid to hybrid versions of midsize sport-utility vehicles, like the Ford Escape, Toyota Highlander, and Lexus RX 400h, to full-size pickup trucks from Chevrolet, GMC, and Dodge to turn up in your local dealers' showrooms within the next year. 3. You'll save money on gas.

With gas prices soaring to more than two bucks a gallon in many parts of the country, there's no smarter reason to switch to a hybrid than fuel efficiency. Just compare the miles per gallon you're getting now with, for example, a Toyota Prius's 60 mpg in the city and 51 mpg on the highway. In fact, hybrid cars can go for more than 600 miles between fill-ups, meaning you should be able to cut visits to your neighborhood gas station in half, saving you time as well as money. If you drive 1, 000 miles a month and your current car averages 20 miles per gallon, driving a hybrid could save \$700 or more a year at the pump. 4. You'll be doing your part to help protect the environment.

Not only do gasoline-electric hybrids get much better mileage than many standard cars, but most also produce about 90 percent fewer smog-forming tailpipe emissions compared with the average new car, according to Dave

Hermance, head of Environmental Engineering for Toyota. 5. You'll set a good example for your kids.

If you like the notion of leaving the world a better place for your children, driving a hybrid is one good way to transform that lofty ideal into a concrete move. Our actions as parents speak louder than our words, even with seemingly simple decisions. Owning an eco-friendly car does more to impart environmental values to your children than countless talks about saving the planet.

6. You'll get cash back from Uncle Sam.

Federal tax credit up to \$3, 400!

More financial incentive to buy a hybrid: The IRS's Clean Fuel Vehicle Tax Deduction allows you to take \$1,500 off your 2004 federal tax bill (the deduction decreases by \$500 a year until it's phased out in 2007). You may also qualify for additional financial incentives offered by state and local agencies; log on to the U. S. Department of Energy's Clean Cities Website (www. ccities. doe. gov/vbg/progs/laws. cgi) to learn more. 7. They're not all super-expensive.

Hybrids tend to cost \$1, 500 to \$2, 400 more than mainstream cars (don't forget about that tax break and major gas savings). But they are becoming extremely popular: Many dealerships have a several-month waiting period for a new one. And it is perhaps this growing demand for hybrids that has sent a message to American automakers — who've been slower than their

Japanese rivals to adopt this new technology — to build cleaner, more socially responsible cars. 8. You'll boost your "coolness quotient."

You can't put a price on this aspect of hybrid ownership, but suffice it to say, driving a hybrid car is a surefire conversation starter among coworkers, fellow parents, neighbors, and even total strangers. Just ask Hollywood hipsters Jennifer Aniston, Brad Pitt, Cameron Diaz, Larry David, and Leonardo DiCaprio — all happening hybrid owners.

Reality Check

Although hybrids offer some significant benefits, there are a couple of points to consider before you sign on the dotted line. * Energy efficiency

All hybrids get better mileage than conventional cars, but there are two different approaches to the powering mechanism, in both current and upcoming models. Some, for example, get better fuel mileage in stop-and-go traffic, while others do better on the highway. Before you settle on a particular model, keep in mind how you'll use the car — as a neighborhood shuttle service or a long-distance commuter-mobile. * Fuel emissions

If your goal is to drive the car or truck with the least possible environmental impact, you'll want to spend some time researching your options. Different engine and even transmission choices can have a significant effect on a car's emissions profile. For example, a Honda Insight with a manual transmission gets better fuel economy than the automatic version, but the automatic version emits fewer pollutants. Essentially, some hybrids are cleaner than

others — and conventionally powered cars with low emissions can be cleaner than certain hybrids.