

Electric vehicle essay sample

[Literature](#), [Russian Literature](#)



* These conditions include passing, hill climbing, and acceleration from a standstill. * However, the engineering and manufacturing costs associated with these technologies often would increase the price of the vehicle to the point where the fuel savings are negligible in comparison. * There are also concerns over the environmental impact of the hybrid car battery which is usually made from either nickel metal hydride or lithium-ion.

Both are considered more environmentally friendly than lead batteries, but nickel-based batteries are known as carcinogens and there are concerns about the health problems they can cause though this is still the subject of much research. * The only type of driving not particularly suited to hybrid cars is regular long-distance driving typical of company cars used on business. During motorway use, the hybrid power-train adds little to the efficiency of the engine at high constant power.

Although hybrid cars reduce CO2 emissions greatly, they are less useful over continuous high speed driving, such as on a motorway where emission levels will increase. A hybrid car still uses to a greater or lesser extent a conventional engine, therefore compared to alternative power sources - such as hydrogen fuel cell or electric - a hybrid car is not as green. * Heavier - a hybrid car not only houses an internal combustion engine but also need an electric motor and battery pack(s), this adds weight and eats into space.

While technology has resulted in battery and motor downsizing, some hybrids still have smaller cabins or loadspace than conventional cars. * there are still a number of obstacles that automakers need to overcome, specifically with regard to electric cars. A Mintel consumer survey found that

87% of shoppers worry about battery lifespan, while another 86% worry about finding a place to recharge their vehicle outside the home. And 85% are put off by the relatively long recharge times required for most plug-ins and electric cars.

Hybrid sales totaled 1.35 million vehicles in 2012, with Toyota Motor Corp. (NYSE: TM) grabbing just over 20% of the total with sales of more than 276,000 hybrids. The company's Lexus division added another 38,000 in sales. * Lexus Hybrid Drive - the hybrid battery is re-charged during the course of driving. When braking, the electric motor goes into reverse, acting as an electric brake and generating electricity. This is fed into the hybrid battery to re-charge it. Simple and clever.