Price: EV vs. Gas-Power

Since most of our oil is imported, your gas money goes pretty far – overseas, that is. The energy equivalent of one gallon of gasoline is 33.53 kWh of electricity (GGE)[8]. A Toyota Rav4-EV has a 27 kWh battery pack[9] (0.805 GGE) and a 100 mile range[9] (124 miles/GGE).

Gas-Powered Vehicles vs. EV Power		
	Miles/ GGE	$/Mile ($3/gal gas)
Full size SUV	10	$0.300
Mid-Size SUV	17	$0.176
Mid-Size Sedan	22	$0.136
Compact Sedan	32	$0.094
Conventional Hybrid	50	$0.060
EV (Rav4-EV) (overnight charge[10] $2.83 for 1 GGE)	**124**	**$0.023** ($0.08447/ kWh)

Most EVs are charged using low-cost, surplus electricity available at night. For $2.83 a Toyota Rav4-EV can travel 124 miles; **less than 2½ cents/mile**!

Assuming $3/gal for gas, the fuel savings for an EV is dramatic – 75% cheaper than a compact sedan; 83% cheaper than a mid-sized sedan; and 92% cheaper than a full-sized SUV. To match the low fuel cost of an EV, **a gas-powered vehicle needs 130 mpg! At $2/gal, the gas-powered vehicle needs 86 mpg**! Even using the more expensive (daytime) rate for electricity[10], the EV fuel cost per mile ($0.050/mile) beats ***all*** gas-powered vehicles.

POWERED BY AMERICAN ELECTRONS

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About the Electric Auto Association

The Electric Auto Association (EAA) is a non-profit educational organization founded in 1967 to promote the advancement and widespread adoption of Electric Vehicles.

The EAA's mission is to act as a public source of information about developments in electric vehicle technology, to encourage experimentation in the building of electric vehicles, and to organize public exhibits and events of electric vehicles to educate the public on the progress and benefits of electric vehicle technology.

Electric Auto Association
electricauto.org

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High Gas Prices Got You Down?

Is there an alternative to gasoline?

Electric Auto Association
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What choices do I have?

You can use public transit, car pool, walk, or ride a bike.

If those options are not available, you can avoid the cost and headache of rising gas prices by driving an electric vehicle (EV). EVs refuel at home. You simply plug them in, and charge using the low-cost, surplus electricity available at night while you sleep. Today, EVs are available from only a few select automakers, but there are kits and companies that will convert a gas-powered car to an EV.

Another choice is a plug-in hybrid (PHEV)

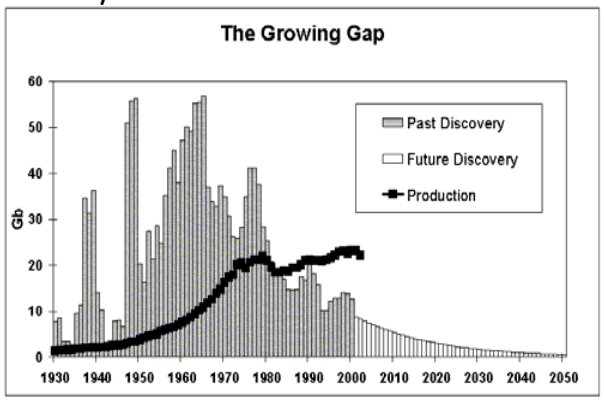
which is like a conventional hybrid electric vehicle (HEV) but with a larger battery pack and a plug to charge the batteries from standard household current. PHEVs are dual-fuel: powered by either electricity, gasoline, or both.

Production PHEVs should start arriving in 2010. Today there are kits and companies that will convert hybrids to PHEVs. Please see CalCars[1] and PlugIn America[2] for more information.

Tell car dealers **"no-plug, no-deal"** when it's time to purchase your next car.

Gasoline is a finite resource

With 4% of the Earth's population, the US consumes 25% of the world's total oil production[3]. Oil production has been declining since 1970 while US imports have risen by 67% since 1970[3].



According to "Peak Oil: An Outlook on Crude Oil Depletion"[4]:

1) Oil discovery peaked in the 1960s;
2) One barrel of oil is found for every 4 barrels consumed;
3) The world production peaked in 1997, and is therefore in decline.

This decline of global petroleum production is not a re-run of the oil shocks of the 1970s. It is driven by resource constraints, not politics, and is a permanent condition. Coupled with the decline in production is a world-wide increase in demand for petroleum as more countries develop and adopt a petroleum-guzzling lifestyle.

Real price of gasoline

In the US, 1981 marked the highest gas price (adjusted for inflation). California set a new record at nearly $5/gallon in 2008. Compared to the rest of the world, the US gas price is still a bargain. In non-oil producing countries, the price is between $6 and $8/gallon[5].

Gasoline Price History[6]		
Year	$/gal (U.S. average)	$/gal (2008 dollars)
1976	$0.59	$2.53
1981	**$1.38**	**$3.66**
1990	$1.10	$1.96
2005	$2.27	$2.81
2008	**$3.61**	**$3.61**

It's estimated that if US government subsidies were removed, the price for gasoline in the US would be between $5.60 and $15.14 per gallon[7]. Future price increases are inevitable since the demand is rapidly outpacing the world supply.

In contrast to the price of gasoline, the price for electricity has not ***drastically*** changed in the past 15 years. Electricity is produced within the US, not imported.