




FCEV Uses 4 Times More Energy than EV – US EPA

2003 Honda FCX	
Miles per kilogram of hydrogen 51 city 48 hwy  Annual Fuel Cost: \$1515*	
EPA Air Pollution Score	
Range	170 miles
Fuel	Hydrogen
Fuel Cell	Polymer Electrolyte Membrane
Motor	60 kW DC
Energy Storage Device	Ultracapacitor
<small>*Annual fuel cost is estimated assuming 15000 miles of travel per year (55% city and 45% highway) and a fuel cost of \$5.05 per kilogram of gaseous hydrogen.</small>	

Honda FCX FCEV

EPA rating:
50 mi/kg H2

Energy to make H2
60 kWh/kg

Energy use per mile:
1.2 kWh/mi

2003 Toyota RAV4 EV Electric Vehicle



Use your Gas Prices



Switch to Metric units

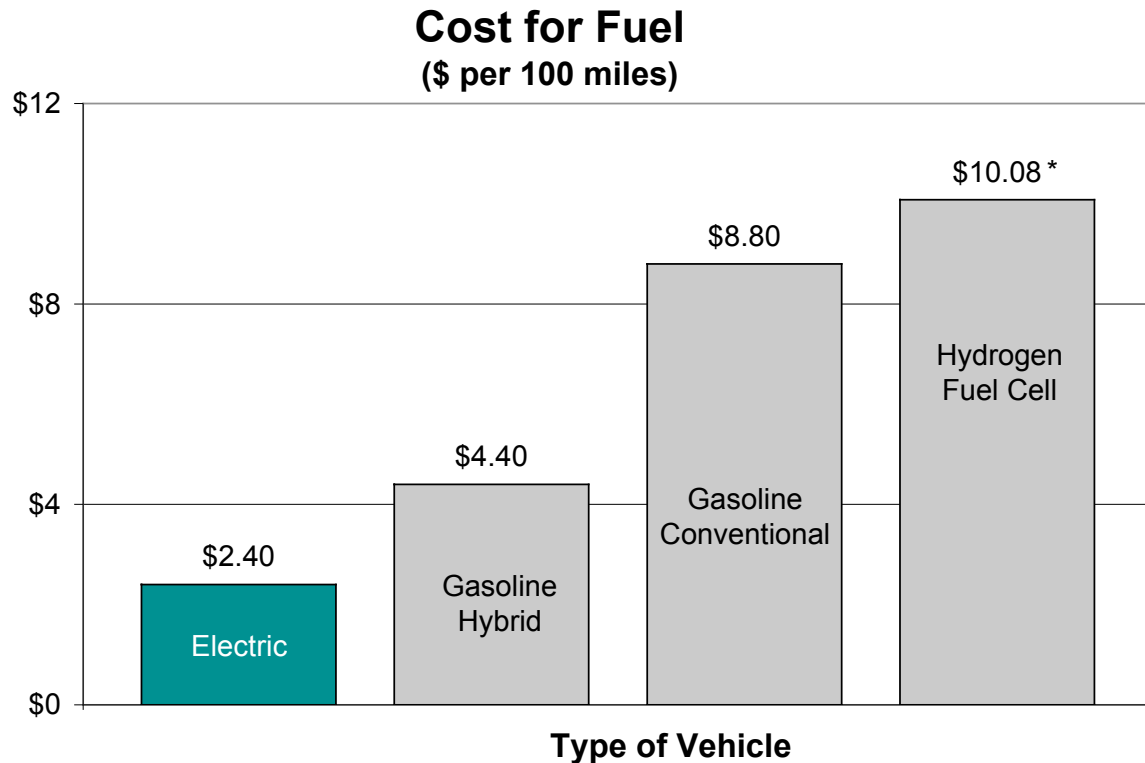
Fuel Economy	
Fuel Type	Electricity
Energy Consumption(city) (kW-hrs/100 miles)	27
Energy Consumption(hwy) (kW-hrs/100 miles)	34
MPG (city)	125
MPG (highway)	100
MPG (combined)	112
Annual Fuel Cost	\$362

Toyota RAV 4 EV

EPA rating:
30 kWh/100 miles

Energy use per mile:
0.3 kWh/mi

Lower Energy Use Means Lower Fuel Costs



Assumptions:

Electric - 3.3 mi/kWh, \$0.10/kWh

Hybrid - 50 mpg, \$2.20/gal

Conventional - 25 mpg, \$2.20/gal

Hydrogen - 50 mi/kg, 63 kWh/kg for H₂ electrolysis+compression
(based on Stuart Energy data), \$0.08/kWh

* cost of electricity only, does not include infrastructure costs