Gas vs. Hybrid?

There seems to be a standing debate about whether people should stop buying gas only cars and go "green" by buying electric or hybrid cars. Electric cars are excellent for around town driving only, because they only have an effective range of 150 miles max per charge. The misconception is that electric cars don't use much energy, but the fact is, electricity has to be produced somehow, and most of the US electricity is produced by burning fossil fuels (coal, petroleum or natural gas). So going electric is not really helping the greenhouse emission problem, it only shifts the burning of fuel from you back to the electric power producers.

Another option to standard gas cars is the hybrid, which is part gas, part electric. This are much better commuting vehicles as they typically have very high miles per gallon (mpg) and the newest models use the motion of the car to help recharge the battery. The downside is they the battery replacements for hybrids are VERY expensive and in order to achieve the 45 mpg or greater fuel economy, these cars are often very small and light. This restricts their use for average size families as a primary car and for long distance, family vacation travel. In addition, hybrids have a VERY high sticker price and cost more to maintain as compared to an average gas car making them very expensive to buy long term.

To determine scientifically how cost effective a hybrid is as compared to an average car, do a cost analysis to determine how long you would have to own a hybrid before it starts to be cheaper to own than a standard gas car [*meaning, find how long it takes until the purchase price + yearly gas cost + yearly maintenance are equal*]. Use the additional national average info given below for your calculations/determination.

Are you surprised by your answer?

How long do you and/or your family typically own a car before getting a new one?
[*The U.S. national average length of ownership is 6 years.*]

Does it make financial sense to by a hybrid based on your results and length of ownership?

How would your conclusions differ if you bought a used car?

What do YOU see as the major benefit of buying a hybrid rather than a gas only car?

Gas Car:

Average Purchase Price = $15000

Average MPG = 20 mpg

Current Gas Price per gallon = $3.61

Yearly Maintenance Cost = $1500

Yearly Miles Driven = 12,500 miles

Hybrid Car:

Average Purchase Price = $28000

Average MPG = 46 mpg

Current Gas Price per gallon = $3.61

Yearly Maintenance Cost = $2000

Yearly Miles Driven = 12,500 miles