James Ewert

Neighborhood Electric Vehicle
Think in Kilowatt Hours
A gallon of gasoline contains 32 kwh of energy. If you drive a car that gets 32mpg you are getting one mile per kwh. 65% of this energy is lost as heat. One gallon of gasoline puts 19lbs of CO_2 into our atmosphere.
I have driven my Nissan Leaf for 4 years and have averaged more than 5 miles per kwh. Little energy is lost in heat and the car regenerates electricity during braking. Electric motors are much more efficient, also.
I do not drive long distances with my Leaf. Every day I find I travel 20 to 30 miles around town. (My leaf, fully charged, will travel around 80 miles). After I travel around town, I hook up my Leaf to a "trickle charger" of 120 volts household current. Each hour of charging at this level restores 1 kwh into the battery, (or 5 miles of driving.) This routine has been very satisfactory for 4 years. All of this electricity comes from my rooftop solar array.
I have another car which is gasoline powered for longer trips, but 90% of the miles I drive a month are in the Leaf. In 4 years I have driven 20,000 miles in my Leaf. A gasoline powered car would have used 700 gallons of gas and put 13,000lbs of CO_2 into our atmosphere.