**OVERVIEW: 2011 Nissan LEAF**
• Not a hybrid; powered 100% by electricity that is mostly made in USA, not in the Middle East. Almost no electricity is produced from oil in the USA

• There is no gasoline motor; no smog checks, no oil changes, no camshaft belts, no tune-ups, no air and oil filters, no oil drips on the driveway/garage. The Chevrolet Volt has and uses a gasoline motor in addition to the electric motor

• Zero tailpipe emissions, and zero emissions when electricity is produced by solar, wind, and/or hydro (dam) power

• 70 to 100 mile range on a full charge

• Lithium Manganese battery has a 8 year/100,000 mile warranty; no battery acid in battery; power does not taper off as battery gets lower in energy

• Charging is normally done overnight, just like plugging in a cell phone

• Highest 5 star crash test rating by US government

• The car’s charger draws about 3.8 kW; a little less than an electric clothes dryer at 4.4 kW

• The car is equipped with a noise maker so that pedestrians can hear it

• $2 to $4 to "fill up" the battery with electricity overnight at your house; ~ 3 cents per mile energy cost (4 miles per kWh @ $0.11 each)

• In 5 months of *Consumer Reports* testing, on average the Leaf consumed 3.16 miles/kWh. Using a standard formula developed by the EPA, that was the equivalent of 106 mpg.

• With electricity priced at the national average of 11 cents/kWh, the Leaf’s running costs are only about 3.5 cents a mile. A Toyota Prius, costs 8.6 cents a mile at today’s fuel prices

• Made in Japan by Nissan; to be built in Smyrna, Tennessee, USA in 2013, in America's largest car plant; batteries will be made in a separate factory in Tennessee

**Fun Gasoline Facts:**
• To extract and refine one gallon of gasoline takes about 12 kWh of energy (not all electricity). That can power the Nissan LEAF about 48 miles.

• In 2010, the U.S. imported oil from Mexico (11%) and from Canada (21%). 42% came from OPEC.

• It takes over 2 gallons of crude oil to produce one gallon of gasoline.

**Popular Misconceptions:**
1. *Electricity is produced from coal:* Yes, it is in much of the USA; about 45%, but our Leaf is powered in large part by solar (residential installation) and up to 47% of current Leaf owners in the U.S. also power their cars with residential solar.

2) *Electric car batteries will fill up landfills with toxic waste:* 94% of lead-acid batteries that EVERY gas car has are recycled and there is no reason that Li-ion batteries cannot be recycled as well. Unlike lead-acid batteries, in addition to recycling, a secondary market will be created for used electric vehicle batteries to provide residential and commercial electricity during peak demand periods.

3) *Batteries cost too much:* Yes, they are very expensive. But, like any emerging technology, the cost comes down quickly with widespread adoption, like televisions, computers, cell phones, etc. The Nissan LEAF has an 8 year/100,000 miles warranty, where you will spend nothing.

4) *Hydrogen is today’s answer:* Perhaps, in 20 years. Unlike electricity, which is everywhere, there is no efficient way to generate hydrogen, there is no pipeline infrastructure to transport it and there are no refueling stations.

5) *Nobody would buy a LEAF without big government handouts:* Currently, there is a $7500 tax credit from the US government with additional incentives in some states. These will expire eventually, and then we’ll know if this is right or wrong!! Nissan is selling every single one they can produce, and there is a waiting list to get one (I waited 4 months).

Info from: MyNissanLeaf.com & news.consumerreports.org/cars/