

Globally Cool Transportation



#### Conditions are favorable

for the success of

Personal Electric Vehicles

Presenting



**THE NmG from MYERS MOTORS** 



No more Gas



#### **Mission Statement**

Bring a new form of urban transportation to the marketplace, the Personal Electric Vehicle (PEV)

The Press says "It's the greatest innovation for commuters since the diamond lane."





### Background

- Development of Sparrow
  - January 1999 prototype development began
  - November 1999 San Francisco Auto Show Exhibit
  - 50 orders secured at Auto Show
  - 36 pre production units developed
- Corbin Motors spin out
- DOT approval
- Approximately 250 Sparrow's were delivered to customers, providing proof of concept
- ✤ 13 million dollars spent
- Corbin Motors files for bankruptcy in April 2003
- Phoenix Environmental Motors obtains assets in August of 2003
- Myers Motors obtains assets and begins refining Sparrow systems in 2004
- First production No more Gas (NmG) Personal Electric Vehicle sold in April 2006



# What are the **Benefits of PEVs**?

- 4 to 1 use of space and energy
- Motorcycle parking
- Use of the HOV lane
- Cost of energy 1.3 cents per mile
- Increases productivity and mobility



# Who is the Market?

- 75 million people commute to work each day
- 90+ % commute alone
- 90 % go less than 20 miles round trip
- Most families have multiple vehicles





## Who else is in the Market?









# What is NmG Visibility?

- TV
- Movies
- Newspapers
- Magazines
- Trade Shows
- Website
- Hammacher-Schlemmer Catalog
   Spring 2007



#### What are the Options? Hydrogen

- Equivalent of \$5 per gallon gasoline
- Numerous technological breakthroughs needed
- Infrastructure requirements: \$1 trillion



#### Mortgage the "skateboard" for 50 years?



# What are the Options? **Ethanol**

- Equivalent of \$4.50 per gallon gasoline
- If all corn and soy crops were devoted to fuel, it would only fulfill 12% of our transportation fueling needs
- Infrastructure requirements: \$100s of billions
- Smog creator
- Food for the poor or Fuel for the SUVs?

## What are the Options? **Electric**



- Equivalent of \$0.40 per gallon gasoline (or, \$20 for 1000 miles)
- 110 volt, 20 amp outlets are everywhere
- 84% of America's 220 million cars and trucks could be "fueled" from EXISTING power plants, if fueled at night.



### What are the claims made against **Electric?**

#### Majority of electricity is coal derived

- 100s of years of domestic reserves of coal,
- Coal plants are cleaner than gasoline powered cars,
- Increases in solar, wind and wave generated electricity will supplement nuclear and hydro
- Batteries cannot store enough energy to be practical or useful
  - The average car drives less than 30 miles per day
  - ✤ 80% of all cars drive less than 60 miles per day
  - ✤ Lead acid batteries can easily handle 30 to 60 miles
  - Lithium batteries become affordable at these ranges

### What is so great about **Electric Vehicles?**

- They use an Alternative Fuel already available and domestically produced
- You can charge one in the convenience of your own garage
- Zero Emissions benefits those breathing in congested urban living conditions
- Electricity is the most efficient, in cost per mile, fuel available anywhere in the US





## What is great about **Three Wheel Vehicles?**



- Time-Savings / Motorcycle
   Privileges:
  - ✤ HOV access
  - Parking
  - First-on and First-off Ferries
  - (Electric advantage ... no more gas stations)

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- Safety features promote its use:
  Totally enclosed from elements
  - Greater stability than two wheels
  - "Like riding in a helmet"

#### How big is the Market?

"I think it's large, 100s of thousands ... I have analyzed early versions of this national data set for a client and know the potential is big for a one-seater, 60mile car. (Your car easily has a 60 mi./day range if it can be plugged in mid-day.)"

-Marty Bernard, PhD



#### How do we reach the Market?





#### What is the **Opportunity**?

#### The world consumes two barrels of oil for every barrel discovered.

So is this something you should be worried abo





It took us 125 years to use the first trillion barrels of oil.

We'll use the next trillion in 30.