

Paul Scott



e-mobility NSR



E-Mobility NSR Conference “Policy, Practice and Profitability”





The Economics of Electric Vehicles

North Sea Region Electric Mobility Network (E-Mobility NSR)

Paul Scott, Founder of Plug-in America

E-Mobility Conference - October 10, 2013

Haarlem, The Netherlands



Challenges: Oil



Oil: Many Benefits, Many Problems

Challenges: Pollution



The Air Our Children Breathe

Challenges: Health



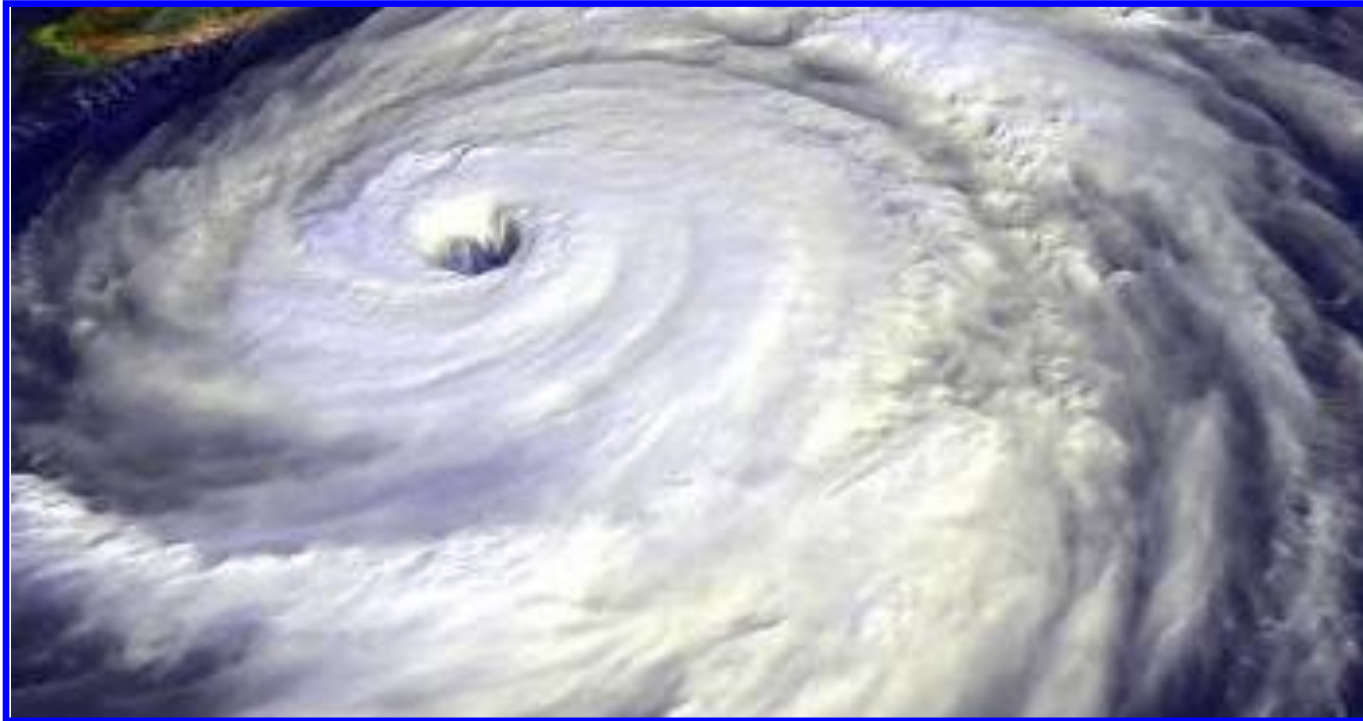
Tens of thousands die every year from internal combustion pollution (Source: WHO). Many of these victims are children who through no fault of their own, live near busy freeways.



Challenges: Climate



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**A rise in summer drought periods in North America
... increasing severe cyclones
...billions of dollars in economic damage
...lost growth, lost jobs.**

The bigger something is, the more it costs to move it.

Mass = Money



Challenges: Transfer of Wealth



\$550 billion per year for gasoline & diesel. 40% leaves the U.S. 90% leaves your community.

Challenges: More Profits – Less Oil

Big five oil companies, with huge profits and tax breaks, are producing less oil

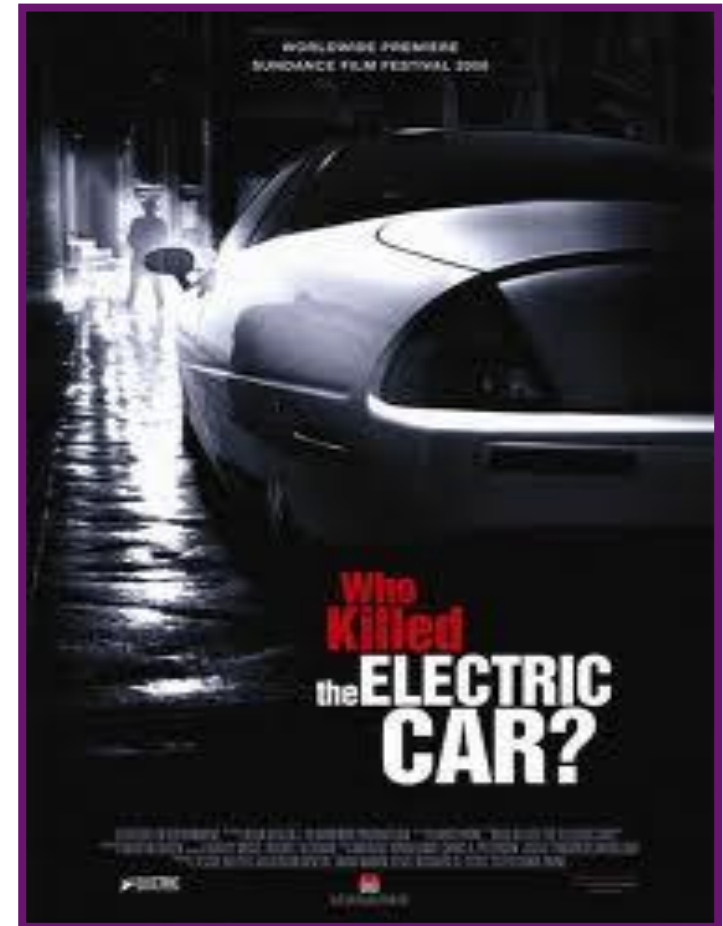
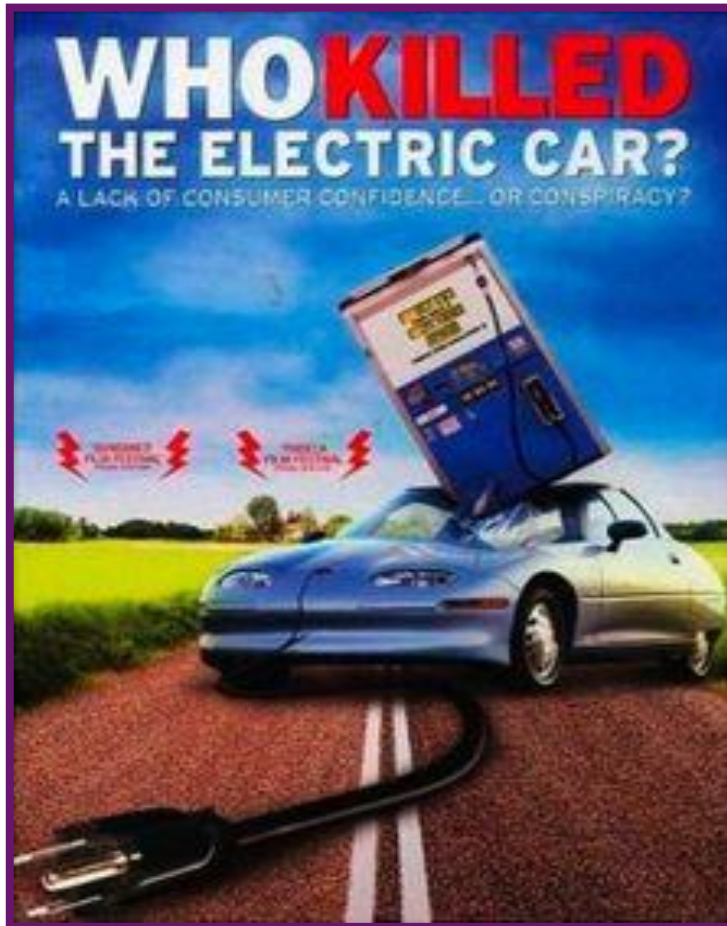
Company	Q1 2013 profits (in billions of dollars)	Cash reserves (in billions of dollars)	Amount of stock buyback (in billions of dollars)	CEO pay, 2012 (in millions of dollars)	Estimated annual existing oil tax break (in millions of dollars)	Percent change in oil production, Q1 2012–Q1 2013
BP	\$4.2	\$28.0	\$0.9	\$2.7	\$300	-5%
Chevron	\$6.2	\$17.4	\$1.3	\$32.3	\$700	-2%
ConocoPhillips	\$2.1	\$5.4	N/A	\$19.3	\$600	-5%
ExxonMobil	\$9.5	\$13.6	\$5.6	\$40.2	\$600	-1%
Shell	\$8.2	\$17.6	\$1.2	\$6.6	\$200	-2%
Total	\$30.2	\$82.0	\$8.9	\$101.1	\$2,400	-2%

Sources: Company profit reports; Daniel J. Weiss and Seth Hanlon, "Romney Tax Plan: Many Happy Returns for Big Oil" (Washington: Center for American Progress Action Fund, 2012).

We spend over \$700 billion every year for oil!

Is there a better use for this money?

Getting Traction



Public Awareness

Getting Traction



Carlos Ghosn



Musk/Lutz



Bill Ford and Obama

Gaining Momentum



The average price paid for a car in the U.S. is \$30K.

Many EVs are less than \$20K.



Gaining Momentum



Tesla Model S

From a 10-year-old company, to the best car in history





in 100 years...

What will power our transportation 100 years from now?

Increasing Momentum



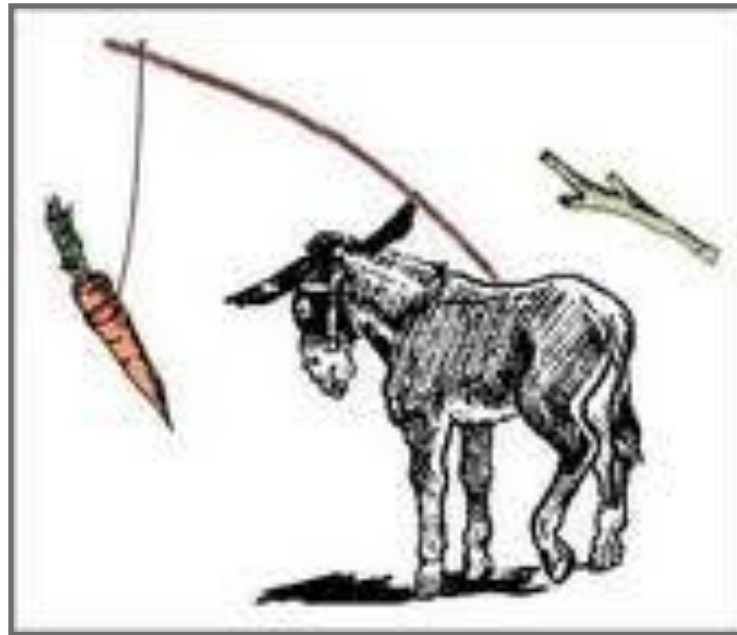
Production EVs



Increasing Momentum



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Incentives or Internalized Externalities?

