Electric Autos and West Virginia Energy
Electric Autos are not a New Concept

1909 Baker Electric

That’s over ONE HUNDRED Years Ago
So, Why is Electric Making a Comeback?

- Advances in Electrical Drive Systems and Batteries
- Electric is very Convenient – especially for Urban Commuters
- Very Affordable on a Day-to-Day Basis
- Almost No Drive-Train Maintenance
- REALLY, REALLY FUN to DRIVE!
Why should We care about electric cars?

- Positive for US & W.Va. Economics
  - Reduce Imported Oil – Eliminate 500 gals gas per EV/yr
  - Limited effect on the Electrical Grid – Charged at night
  - Powered by COAL

Electric cars use power from the electrical grid
In W.Va. they are Powered by COAL!

An EV in W.Va. consumes 8 to 11 pounds of coal per day

100,000 EVs in W.Va. would consume 150K – 200K tons/year of coal
West Virginia Electric Auto Association
Analysis

Engineering assumptions:
Coal heating value – 13,000 BTU/lb (S. WV Steam)
Power plant heating value – 0.67 lb coal / kwh
Electric car mileage – 3 miles / kwh
US car average miles driven – 37 miles/day
Coal Market Share – 70.2% - (from Midwest ISO)
Coal Market Share – 95% - (West Virginia only)
Say What? 100K EVs in our Region?

- There are 420,000 plug-in cars **NOW** in USA
- 25 models across 15 brands – **Today**
- More than 50 new models in pipeline
  - From GM, Ford, Nissan, BMW, Audi, VW, Mitsubishi, Volvo, Apple and others

**One Million EVs will consume 1.5MM – 2MM tons/year of Coal and save 500MM gals of gas**
IN SUMMARY

EVs are Here & More are On the Way
• Advances in Electrical Drive Systems and Batteries
• Electric is very Convenient – especially for Job Commuting
• Very Affordable on a Day-to-Day Basis
• Much Reduced Vehicle Maintenance
• REALLY, REALLY FUN to DRIVE!

West Virginia stands to benefit:
• Increased Coal Usage
• Reduced Oil Imports
• Grid Friendly Electrical Consumption
• Market Boosts Available for Tourism and Retail Sales
IN CLOSING

The West Virginia Electric Auto Association is a ready resource for Information and Policy Development

Contact us via the Internet at

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