

5th Annual
Electric Vehicle Workshop &
The Only Smoke In The Air,
Networking BBQ



July 15, 2015

Agenda



TOSITA Agenda July 15, 2015

- 9:30 - 10:00: Registration**
- 10:00 -10:10: Welcome- PECO Perspective**—Bill Patterer -**PECO**
- 10:10- 10:20: Workshop Agenda/ EP-ACT Intro/EV overview**
Tony Bandiero **EP-ACT**
- 10:20- 10:35: EVSE's- What are They? –**
Michael Moser- **EV Charge Solutions**
- 10:35-10:50: Networking, Workplace, and Retail Charging –**
Andy Kinard- **Car Charging**
- 10:50-11:00: Break**
- 11:00-11:20: V2G, is it Real? –**Dick Johnson - **Autoport**
- 11:20-11:30: Nissan EV's/ Leaf-** Jean Gough- **Nissan North America**
- 11:30-11:40: BMW –** Elliot Bonnett- **BMW of the Main Line**
- 11:40-11:50: Light Duty/Vans- EV's–** Jeff Esfeld- **VIA Motors, Inc.**
- 11:50-12:00: Electric School Buses – really!–** Marc-Andre Page- **Lion Bus**
- 12:00- 2:00: TOSITA Networking BBQ-**
Vendor tables & Vehicle Displays



Special Thanks to our TOSITA Sponsors





The - Who is Clean Cities?

Coalitions are made up of local and national stakeholders



- 87 active coalitions in 45 states
- Over 10,000 stakeholders combined
- 49% private stakeholders
- 51% public companies





The- What is Clean Cities?

- **A Public/Private Partnership for Clean Fuel Vehicles and Fuel Efficient Technologies**
- **Provides a framework for businesses and governments to work together as a coalition to enhance markets**
- Sponsored by the DOE's Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Program (EERE)
- Coordinate activities, identify mutual interests, develop regional economic opportunities, and improve air quality



The- What is Clean Cities?

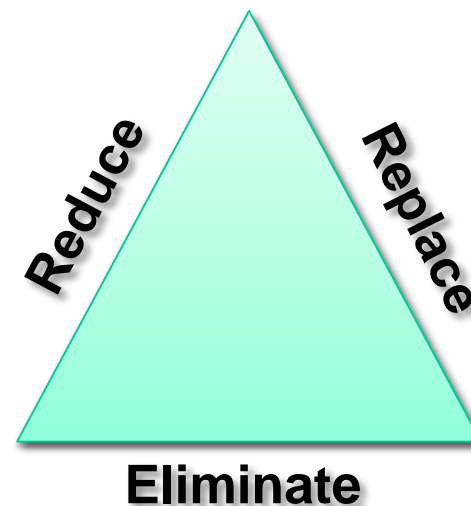
Mission

To advance the energy, economic, and environmental security of the United States by supporting local decisions to reduce petroleum use in transportation.

Goal

Reduce petroleum use by 2.5 billion gallons per year by 2020

- Replacement
- Reduction
- Elimination



Accomplishments

- Saved over 7 billion gallons of petroleum since 1993
- Put more than 775,000 alternative fuel vehicles (AFVs) on the road
- Installed more than 10,000 alternative fueling stations

Reducing Petroleum Consumption

- Petroleum = most consumed energy source in U.S.
- About half of petroleum used is imported
- U.S. spends
 - \$1 million per minute on petroleum
 - \$Nearly one billion per day on petroleum imports
 - \$5.7 billion per week on petroleum imports
 - \$297 billion per year on petroleum imports

Who is: EP-ACT?



- **Non-profit 501 (c) (3) organization**
- **Comprised of Public and Private Companies**
- **Assist with grants/writing/ Project Management**
- **Education and Outreach**
- **Tiered Levels of Stakeholder Membership**



The Where, of EP-ACT



Basics: Electricity as a Fuel Source



Electricity is considered an alternative fuel under the Energy Policy Act of 1992.

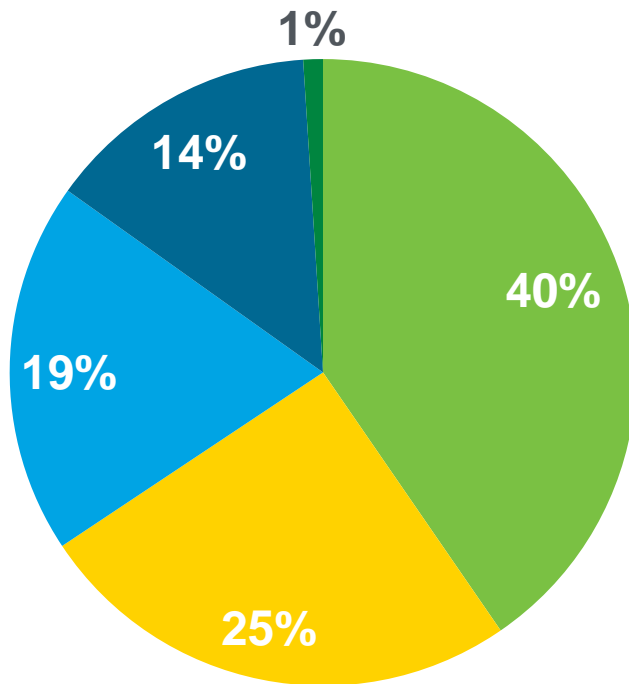


Electric drive vehicles use electricity from on- or off-board electrical power sources and store it in batteries.

Basics: Electricity Production

Sources of U.S. Electricity Generation, 2014

■ Coal ■ Natural Gas ■ Nuclear
■ Renewable ■ Petroleum



- Most electricity in the U.S. is produced by steam turbine generators at power plants
- Travels from generating facilities to distribution facilities
- With appropriate planning, plug-in electric vehicles (PEVs) are unlikely to strain existing electricity infrastructure in the near term

Source: U.S. Energy Information Administration

Basics: Electric Drive Vehicles



Hybrid Electric Vehicle (HEV)

- Powered by an engine and electric motor
- Does not use electric vehicle supply equipment (EVSE) to charge the battery



Plug-In Hybrid Electric Vehicle (PHEV)

- Powered by an electric motor and engine
- Uses EVSE to charge the battery



All-Electric Vehicle (EV)

- Powered by an electric motor
- Uses EVSE to charge the battery

Vehicles on Display Today

Ford C-Max Energi



Nissan Leaf



BMW i3



Mini-e Cooper



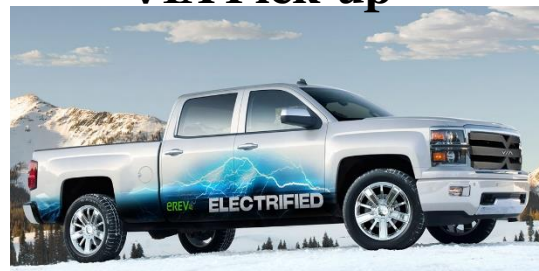
Lion School Bus



Chevy Volt



VIA Pick-up



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