Plugging In North Carolina

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About Advanced Energy

- Independent, non-profit organization established in 1980, Headquartered in Raleigh, NC
- Mission: Create economic, environmental and societal benefits through innovative and market-based approaches to energy issues
- Provide training, consulting, testing and outreach
  - Transportation Initiatives
  - Building Sciences
  - Energy Efficiency
  - Renewable Energy
  - Motors and Drives
Presentation Agenda

• Electric Vehicles in North Carolina
• NC PEV Taskforce
• Community Planning
• Education & Outreach
• Municipality Charging
• Workplace Charging
• Multifamily Charging
Available PEVs in North Carolina

**Electric Range in Miles:**
- BMW i3 All Electric – 81
- BMW i8 Plug-in Hybrid – 15
- Cadillac ELR Plug-in Hybrid – 37
- Chevrolet Volt Plug-in Hybrid – 38
- Ford C-MAX Plug-in Hybrid – 21
- Ford Focus All Electric – 76
- Ford Fusion Plug-in Hybrid – 21
- Mitsubishi i-MiEV All Electric – 62
- Nissan LEAF All Electric – 84
- Porsche Panamera Plug-in Hybrid – 16
- SMART All Electric – 68
- Tesla Model S All Electric - 265
Electric Vehicle Registrations - 2012
Electric Vehicle Registrations - 2014
Plug-in Electric Vehicle Adoption

PEVs in North Carolina

- 2012: 500
- 2013: 1500
- 2014: 3000
- 2015: 4500

PEVs in USA

- 2012: 50,000
- 2013: 100,000
- 2014: 150,000
- 2015: 200,000
Charging Stations in North Carolina

NC EV Charging Stations and PEV Ownership by County of Residence

EV Charging Stations
- Level 2 Stations

Existing DCFC Stations
- Public
- Public - Call ahead
- Private
- Tesla Stations

Planned DCFC Stations
- Planned DCFC Stations

Source: NC PEV Taskforce

PEV Ownership by County of Residence

Source: NC DMV

Map Created October 20, 2014
Charging Stations – National Market

North Carolina Stations
- 12 highest state for stations
- 785 Charging Outlets
The NC PEV Taskforce

- Established in 2011 to provide a collaborative opportunity for stakeholders to identify and address barriers to plug-in electric vehicle adoption in order to ensure a seamless integration of PEVs into local communities
- Focus Areas: Community Readiness, PEV Education and Outreach, Workplace Charging, Multifamily Charging, DC Fast Charge Planning
Community Planning for PEVs

• Three Levels of Planning:
  – State-wide/Multi-state Planning
    • Regional EV Corridors
    • Share Best Practices/Lesson Learned/Trends
    • Compile and Share Data
  – Regional
    • Regional PEV Planning
    • Local EV Deployment (intra-urban charging station planning)
  – Local
    • Fleet Initiatives
    • Local Codes and Ordinances
    • Permitting
    • Workplace Charging
    • Multifamily Charging
Education and Outreach

• Webinars
• Workshops
• Ride-and-Drive Events
• Conference Booths
• Festival Booths
• Newsletter
• Social Media
• Resources
Resources

- WWW.PlugInNC.Com
Local Efforts: Workplace Charging
Local Efforts: Cities and Counties
Local Efforts: Multifamily Charging
Future Goals for Electric Vehicles in NC
Thank You!

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