Plug-in Electric Vehicle Readiness Initiatives

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About Advanced Energy

- A nationally recognized independent, non-profit organization, established in 1980
- Mission to create economic, environmental and societal benefits through innovative and market-based approaches to energy issues
- Provide consulting, training and testing in the following focus areas:
  - Emerging transportation initiatives
  - Applied building sciences (residential, commercial and industrial)
  - Energy efficiency
  - Renewable energy
  - Motors and drives
Advanced Energy’s Transportation Initiatives team takes an **integrated, holistic approach** to help all stakeholders and members of the community understand, plan-for and implement **emerging transportation initiatives**.
NC PEV Taskforce

- Established by the N.C. Department of Commerce and Advanced Energy in 2011
- Infused with resources by U.S. DOE grant: “Plugging In from Mountains to Sea”

Goals of Taskforce
1. Identify and address barriers to PEV adoption
2. Involve industry partners
3. Recruit new industry
4. Prepare N.C. to take advantage of funding
5. Create and implement a PEV roadmap for N.C.
NC PEV Taskforce (cont.)

- 200+ participating organizations
- 150+ municipalities represented
- 450+ individual participants
- 6 Working groups / meet monthly
- Regular NC PEV Taskforce Events
North Carolina’s PEV Readiness Plans
NC PEV Roadmap: Highlights

- More than two-thirds NC counties with registered PEVs
- EPRI Estimates – more than 750,000 PEVs in NC by 2030
- 600+ public and workplace charging stations
- Survey of incentives for fleet managers
- Review of policies, codes and standards:
  - Zoning
  - Americans with Disabilities Act (ADA)
  - Local Planning and Policy Documents
  - Historic Districts
  - Signage
- 35 NC Events, Trainings, Workshops reaching more than 2,000 people in 2012
QUESTIONS?

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Additional Information
Advanced Energy’s Transportation Team takes an integrated, holistic approach to help all stakeholders and members of the community understand, plan-for and implement emerging transportation initiatives.

Consulting & Facilitation
- Municipal / State PEV planning
- Utility PEV programs
- Infrastructure & vehicle support
- Workplace charging

Education & Outreach
- Industry workshops
- Training curriculum
- Public outreach

Investigative Research & Testing
- Technology briefs
- Case studies
- Demonstrations & testing
Benefits of Plug-in Electric Vehicles

- **Lower Cost**
  - $0.50 – $0.75 per gallon equivalent, reduced maintenance

- **Energy Security**
  - Reduced oil imports, Distributed Infrastructure, Diversified Fuel Sources

- **Fewer Emissions**
  - Reduced Mobile source emissions
  - Increased benefit with greening of generation

- **Better Performance**
  - PEVs will meet the performance expectations of Americans
Why Plan for PEVs?

- Preparation and Good Practice
  - permitting, ordinances, inspections, best practices
  - infrastructure

- Preempt Liability Issues
  - Americans with Disabilities Act
  - Trip hazards, block walkways, etc.

- Economic Development
  - 2012- Clean Energy Sector generated $3.7 billion in NC - NCSEA Clean Industries Census
  - The United States has a $1.63 billion clean energy trade surplus with China - Pew Charitable Trusts

- Benefits of PEVs May Overlap with Goals of Existing Plans
  - Improved air and water quality
  - Reduced dependence on oil
  - Lower fueling and operating costs
  - Public Health
Resources & Readiness Plans

- Municipal / State PEV Planning Guides
- Charging Station Installation Handbooks
- Charging Station Technology Reviews
- Community PEV Initiative Templates
- Workforce Development
- Readiness Plans and Roadmaps
- Informational Handouts
- Standards and Guidelines

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