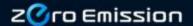
NUTC Workshop – Electrification of Transportation



Terry L. Komlos Manager, Zero Emission Mobility Corporate Planning 10300 April 2012 Z**O**ro Emission



Challenges of Electric Vehicle Adoption



Key Challenges



Electric Vehicle Price

Driving Range

Availability of Public Infrastructure







- Additional incentive examples:
 - West Virginia: tax credit up to \$7500
 - Georgia: tax credit up to \$5,000
 - Hawaii: rebate up to \$4,500
 - Illinois: rebate up to \$4,000

Incentives are an important bridge until mass production can bring down price through economies of scale

Localized Nissan LEAF Production



- New state-of-the-art facility currently under construction
- Electric Motor Powertrain to be built at the Decherd Powertrain Assembly Plant





Understanding Driving Range On average 90% of the U.S. population drives less than 100 miles a day

Typical consumer driving patterns:

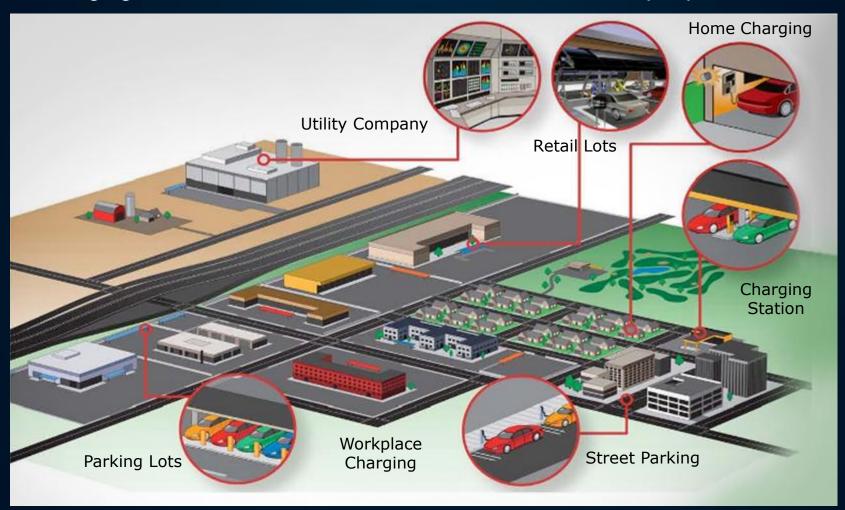
- Weekday 73% drive less than 50 miles per day
 27% drive 5-10 miles per day
- Weekend 66% drive less than 50 miles per day
 24% drive 20-29 miles per day



Life with an EV: Infrastructure Eco System



Charging an EV will be much more convenient than most people think.





Public (Planned) Infrastructure



More than 13,000 EV Charge Stations on the way by the end of 2012...





Installed Public Infrastructure





Estimated Number Of Public Charging Stations:

Level 2 (240V): 5,300

DC Fast Charge (480V): 50



Infrastructure Priorities



Allows for Mass Adoption

- Relieves "range anxiety"
- Fast charging capability enables timely travel over longer distances

Public

Workplace Charging

Supports EV Ownership

- Supports corporate "green" image
- Provides charging for those without dedicated home charging

Residential Home Charging

Majority of Charging

- Owners with single family homes will charge overnight at off-peak rates
- Issue Multi-Dwelling units



The Nissan Vision



"A new era is beginning in the global automotive industry. At Nissan and Renault, we are working together to lead the way to mass-market zero-emission mobility."

—Carlos Ghosn, Chairman & CEO, Renault-Nissan Alliance



