ecotality™

The leader in clean electric transportation.

Prepared for:

California Public Utilities Commission

eTec
An ecotality Company

innergy power
An ecotality Company

October 12, 2009

ECOtality, Inc.

The leader in clean electric transportation

- **Largest Deployment of EVs + Infrastructure**
  - 4,700 Nissan EVs • 11,210 charge stations • 5 states/markets
  - $107.8 M in US Dept. of Energy & California Energy Commission funding
- **Leading EV Infrastructure Experience**
  - Involved in every major N. American EV initiative since 1990's
  - 5,600+ Charging Stations Installed
- **Premier Battery Fast-Charge Systems**
  - 50+ US & International patents since 1990
  - Fortune 500 customer base
- **Advanced Transportation R & D, Engineering & Testing**
  - Primary Contractor to U.S. Dept. of Energy in EV sector
  - 10+ million miles of testing on 200+ advanced fuel vehicle

eTec

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Electric Transportation Engineering Corp.

Largest deployment of EVs & charge infrastructure

Involved in every major N. American EV initiative since 1989

Power Electronics, R & D, Engineering, Electric Drive Systems

Contracted for DOE's Advanced Vehicle Testing Activity

Industry leading Minit-Charger line of fast-charge systems

Other Activities:

- **EV Infrastructure (Levels 2 +3)**
- **Battery Performance testing**
- **Battery cycling & development**
- **Consulting/Engineering Services**

- **H_2 Infrastructure**
- **H_2 ICE Vehicles**
- **Alternate fuel infrastructure**
  - Electric, CNG, H_2 & H_2 blends

eTec Minit Charger

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Charges faster & safer vs. any other systems

50+ US & International patents

Meaningful charge for an EV in ~15 mins

Originally designed for on-road EV use

Used in airport, industrial & on-road applications

Proven Benefits:

- Reduces annual fueling costs by 70-80%
- 50-65% smaller & 50-70% lighter
- Increases worker productivity & safety

Current Markets

Airport GSE

Material Handling

NEVs

Emerging Markets

EVs + PHEVs

Public Charging

Commercial Charging

EV Charge Infrastructure Experience

Complete "Turn-key" Infrastructure Services

- *Over 400 EV chargers installed*
  - *Residential / Commercial / Public*
- *Recently awarded $99.8 million DOE Award to install and analyze EV infrastructure in five market launch areas*

EV Charging Infrastructure Experience

eTec Public Stations

- Grant procurement
- Coordination with local utilities and government agencies
- EV Station Features
  - Access / Data Monitoring Systems
  - Security Lighting
  - 24 Hour Customer Service Line
  - Integrated Power Section and Separate Metering
  - Instructional / Advertising Panels
  - Bumper Guard / ADA Compliant

eTec Charger Products

EV/PHEV, Material Handling, Airport GSE

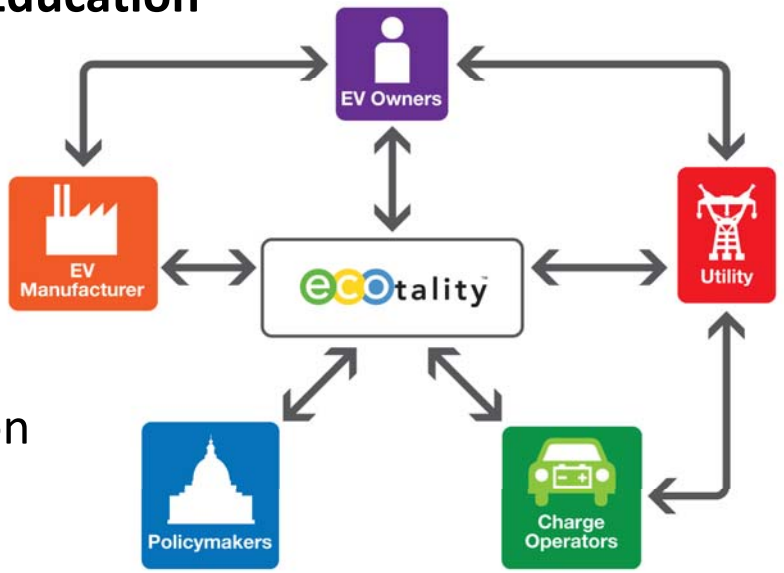
- Developing next generation Level 2 & 3 PHEV/EV Supply Equipment
  - J1772 compatible
- Expected availability in Q2 2010

Conceptual Fast Charge Stations

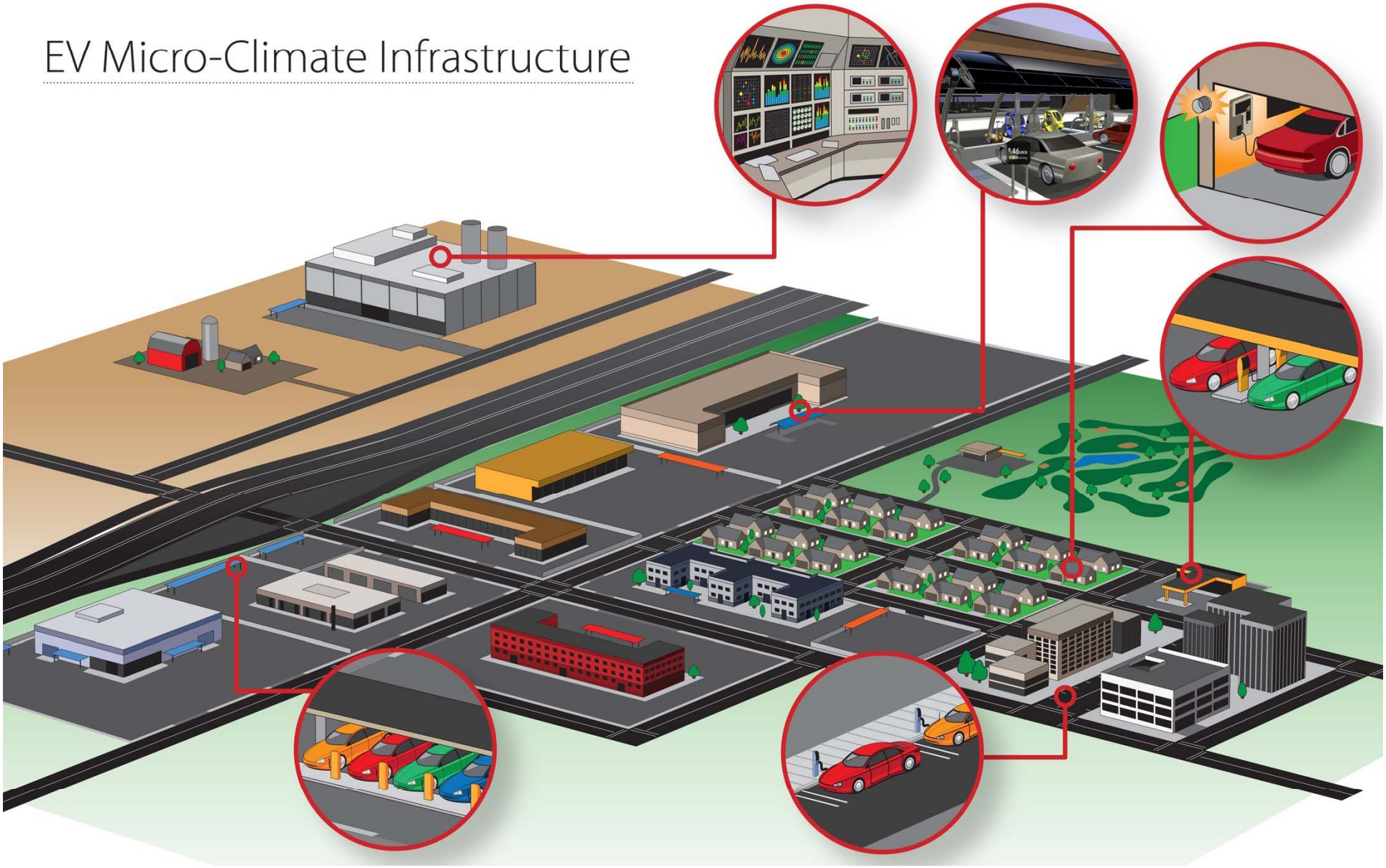
EV Activities

A holistic approach to EV infrastructure

- **EV Micro-Climate Program**
  - Ensures areas are “plug-in ready”
  - Establishes alliances w/ key stakeholders
  - Provides detailed Roadmap/Action plan
  - Implements universal public charge infrastructure
  - Establish Micro-Climates & connect w/ Fast-Charging
- **Active Government Relations & Public Education**
- **Soft Infrastructure Development**
  - First responder training
  - Code inspection officials coordination
  - Roadside assistance development
  - Instal contractor training & certification
  - Dealer training
  - Public awareness



EV Micro-Climate Infrastructure



DOE FOA 0000028

The largest deployment of EVs & Charge Infrastructure

Deployment: 5 states / 11 markets:

- **Arizona**
  - Phoenix/Tucson
- **California**
  - San Diego Region
- **Oregon**
  - Portland, Eugene, Salem, Corvallis
- **Tennessee**
  - Nashville, Knoxville, Chattanooga
- **Washington**
  - Seattle

Funding Overview:

- **$207.6 M total project value**
  - *$99.8 M in US DOE funding*
  - *$8 M in CEC funding*
  - *Partners provide matching costs*

Project Overview

- ECOtality's eTec is Project Manager
- 4,700 Nissan LEAF EVs
- 11,210 charge stations deployed
  - *4,700 residential (L2)*
  - *6,250 public/commercial (L2)*
  - *260 Fast-Charge (L3)*

Project Schedule

• Contract	10/1/09
• Initial Infrastructure	Q3 2010
• Vehicle Launch	Q4 2010
• Final Infrastructure	Q2 2011
• Evaluation Ends	Q3 2012
• Completion	Q2 2013

40+ project participants

Residential Infrastructure Deployment

- ~ 900 - 1,000 Nissan LEAFs in each market area
  - Program sign up at Nissan Dealer
  - Participant qualification required
  - Vehicle data collection
- ~ 900 - 1,000 Level 2 residential EVSE in each area
  - “Smart” chargers for user functionality
  - Revenue grade demand & energy metering
  - Internet based data collection - wired interface
  - Internet based user interface
- Project Partners:

GRIDPOINT®

Bovis Lend Lease

Commercial Infrastructure Deployment

- ~ 1,250 Level 2 EVSE in each market area
  - Revenue grade demand & energy metering
  - Revenue system pilot(s)
  - Internet based data collection - cellular interface
- Initial installations tied to retail locations
- Employer locations tied to vehicle sales
- Project Partners:

CBRE CB RICHARD ELLIS

Bovis Lend Lease

Public Infrastructure Deployment

- ~ 200 Level 2 EVSE in each market area
- Locations coordinated w/ local government
- Revenue system pilot(s)
- Project Partners
  - City & County governments
  - Electric Utilities
  - Coulomb Technologies

Coulomb Technologies

Fueling the Electric Transportation Industry

Fast-Charge Infrastructure

- 260 total Level 3 Chargers
- ~ 50 Level 3 chargers in each market area
- Telematics interface provides status
  - Price
  - Availability
- Project Partners:

Bovis Lend Lease

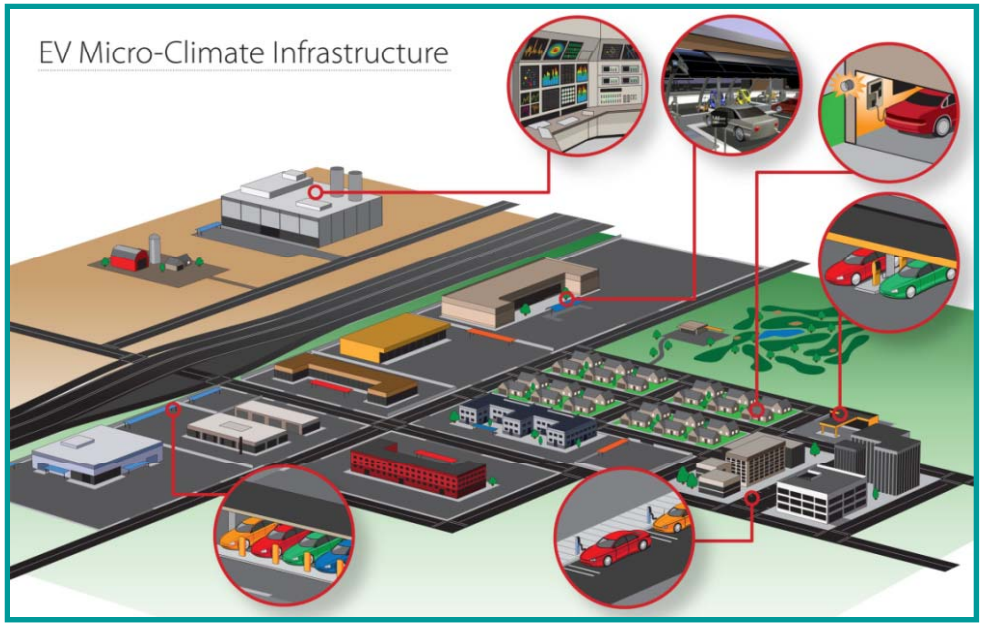
bp

CBRE CB RICHARD ELLIS

Cross Country Automotive Services / ATX

Data Management & Analysis

- Vehicle and Charger utilization
- Smart Grid Integration
  - Utility Impacts
  - Demand reduction pilots
- Lessons Learned
- Project Partners



Idaho National Laboratory

THE OHIO STATE UNIVERSITY

GRIDPOINT

UCDAVIS

Over 40 Project Partners

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Websites

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www.minit-charger.com

APPENDIX SLIDES

eTec Minit Charger

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Material Handling Products

- **Model 355/448**
  - 400Amp Output
  - Parallel or Sequential Priority Charging
- Launched in 2002
  - Only system to provide Sequential Priority Charging which reduced utility infrastructure and demand costs

- **Model "PJ"**
  - Dual 110Amp Output, High Frequency design
  - Designed for electric Pallet Jacks
- Launched in 2005
  - First high-frequency fast charger specifically designed for pallet jacks
  - Lightweight and efficient design

- **Model "SC"**
  - Single Output, High Frequency design
  - 250Amps DC Output
  - Medium to heavy duty applications
- Launched in August 2008
  - High frequency, multi-shift and retail store applications
  - Low cost battery identifier
  - Lightweight and easy to install and operate

- **Model "FCx"**
  - Single Output, High Frequency design
  - 320Amps DC Output
  - Medium to heavy duty applications
- Est. Launch in Spring 2009
  - High frequency, multi-shift charger for medium to heavy duty applications
  - Ideal for Automated Guided Vehicle applications (AGV)

eTec Minit Charger

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Airport Ground Support Equipment

- **Model GSE-200SP/DP**
  - 15kW Single and Dual Output Available
  - Outdoor Rated
  - Multi-voltage, Multi-chemistry
  - Launched in 2003
- **Model GSE-250SP/DP-hf**
  - 15kW Single or Dual Output
  - High Frequency Design
  - Lighter/less expensive design
  - Exp. Launch fall 2008
- **Model GSE-300DP**
  - 30kW Dual Output (15kW per side)
  - High Frequency Design
  - Designed for heavy-duty applications
  - Exp. Launch fall 2008