

**AB 118 Investment Plan 2010-2011**  
**Electric Drive Workshop – September 9, 2009**  
**Vehicles, Nonroad Electric Applications and Manufacturing Plants**

The California Energy Commission is conducting this workshop to obtain information and insights about the contribution that electric drive transportation technology offers to reduce greenhouse gas emissions and displace petroleum fuels in California. Electric drive technologies offer a potential benefit to achieve state goals; however, high, upfront capital costs among other challenges impede market expansion and vehicle deployment. Each year the Energy Commission re-evaluates the need for economic incentives to increase the development and use of alternative fuels and vehicle technology in California's transportation sector under the AB 118 program. Information is needed to justify the rationale for incentives, the magnitude or amount of incentives, effective incentive mechanisms and the length of time before incentives are not required. An outcome of this workshop and other related activities will be an updated Investment Plan that recommends an allocation of \$100 million available in FY 2010-2011.

**Questions for Panel Speakers**

Vehicles

1. Describe the status of your vehicle, including:
  - Stage of development
  - Remaining steps and timeframe to achieve full commercialization
  - Number of electric drive vehicles on the road today (and in California)
  - Performance
  - Driving range and other operating characteristics
  - Status of safety/roll over approval
  - Vehicle and major component capital costs and vehicle (and operating cost) to the consumer or fleet buyer
  - Greenhouse gas emission benefit
  
2. Describe the anticipated roll out of your plug-in, battery electric, electric conversion passenger, commuter, bus, truck or other vehicles in California and the U.S. over the next three years. For California roll out, quantify the number of vehicles, geographic location of sales or leases and the quarterly timeframe for the market introduction and expansion.
  
3. Substantiate the customer demand for the purchase/lease of your vehicle, quantify/describe the anticipated customers and their geographic locations, and indicate how you have obtained this information.
  
4. Comment on how the vehicle roll out helps achieve California's quantified 2020 and 2050 goals to reduce greenhouse gas emissions and petroleum dependency for one or more vehicle classes and meet passenger vehicle ZEV mandate objectives.

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5. Substantiate the differential costs of the electric vehicle compared to a gasoline or diesel counterpart. Given your product pricing strategy and level of production, what level and type of incentives will be needed to enhance your deployment strategy, if incentives are needed? What is the potential to achieve cost reductions through economy of scale production, technology advances, manufacturing strategies, petroleum price increases or other market and regulatory influences? Describe conditions and circumstances required for your vehicle to be cost-competitive with gasoline and diesel options.

#### Other Electric Vehicle and Non Road Applications

6. Describe the current status of other electric vehicle/nonroad applications and customer demand, provide information on the cost of these applications compared to diesel or gasoline counterparts, verify the environmental benefits, and present a rationale justifying incentives and incentive amounts.

#### Manufacturing

7. Describe your production capability to manufacture and assemble vehicles and component parts and the timeframe to start up or expand production. How much of the manufacturing and assembly will occur in California and how many new jobs will this create?

8. Why are incentives needed to stimulate California-based manufacturing? Are you receiving incentives now? How much and what type of additional incentives are needed? At what point will the need for incentives diminish?

9. What is the potential to achieve cost reductions through economy of scale manufacturing, technology advances or other factors?

#### All

10. Describe the investment sources that you offer as match funding for AB 118 incentives, identify project partners, and describe your efforts and responses to attract private investment. How has the economic downturn affected capitalizing your product deployment schedule? Have you changed your business model and deployment strategy as a result of the national fiscal crisis?

11. Based on expected electric vehicle and nonroad application market growth, describe the need, number and location of electric charging systems in California.

12. Describe how AB 118 funds could be allocated to resolve electric drive challenges and barriers not addressed in previous questions. Provide a rationale for incentives, studies or actions and the amount of the allocation.