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April 20, 2009

**Ford Motor Company Comments on**  
**Notice of Public Meeting to Consider the Adoption of the**  
**Proposed AB 118 Air Quality Improvement Program Funding Plan**  
**For Fiscal Year 2009-10**

**April 23, 2009**

Ford Motor Company (Ford) welcomes the opportunity to comment on the Air Resources Board (ARB) Proposed AB 118 Air Quality Improvement Program (AQIP) Funding Plan for Fiscal Year 2009-10. Ford supports the use of incentives to encourage the purchase of clean, alternative fuel vehicles. Incentives will help change the future of California's transportation system by reducing the cost of the initial introductions of more expensive alternative fuel technology.

Ford supports the ARB's proposed AB 118 AQIP Funding Plan for Fiscal Year 2009-10; however, we have a couple of recommendations as summarized below:

- 1) Type I.5 ZEV (75 – 100 miles) should receive a rebate of \$5,000 per vehicle
- 2) Move the zero emission commercial vehicle rebate to the Hybrid Truck and Bus Voucher Incentive Project
- 3) Retain the plug-in hybrid incentive of \$5,000 per vehicle
- 4) Eliminate the neighborhood electric vehicle incentive

## **Type I.5 Zero Emission Vehicles (ZEV)**

The proposed AQIP Funding Plan caps the rebates for Type I electric vehicles (those with range of 50 to 100 miles) to \$3,000 per vehicle. However, the most recent revisions to the ZEV regulations, as approved by the Office of Administrative Law on March 18, 2009, introduced several new classes of ZEVs. One class, a Type I.5 ZEV, falls between a Type I ZEV (generally described as a City EV with minimum range of 50 miles) and a Type II ZEV (generally described as a full function battery EV with minimum range of 100 miles).<sup>1</sup> Under the revised ZEV regulations, a Type I.5 ZEV has a range of greater than or equal to 75 miles and less than 100 miles, whereas a Type I ZEV has a range greater than or equal to 50 miles and less than 75 miles. The ARB made this change to the ZEV regulation because a Type I.5 ZEV may provide an optimal, cost effective, and marketable battery electric that is short of the 100 mile requirement of a Type II ZEV but greatly exceeds the 50 mile requirement for a Type I ZEV.<sup>2</sup> As the ARB recognized in the Statement of Reasons, battery electric vehicles are still in the demonstration (100s / year) phase and there continue to be significant technological and cost barriers to overcome. Therefore, Ford recommends that a Type I.5 ZEV receive a rebate of \$5,000 per vehicle; whereas, a Type I ZEV would receive \$3,000 per vehicle, as proposed.

## **Zero-Emission Commercial Vehicles**

The AQIP Funding Plan proposes rebates of \$20,000 per vehicle for a zero-emission commercial vehicle (i.e., 10,000 – 33,000 lbs. GVWR). Ford does not believe it is appropriate to include this class of vehicles in the "Zero-Emission and Plug-In Hybrid Light-Duty Vehicle Rebate Project". The ARB should continue the momentum of the existing Alternative Fuel Vehicle Incentive Program (AFVIP), which has been oversubscribed, by concentrating on *light-duty* vehicles. Light-duty zero-emission and plug-in hybrid vehicles are just beginning to enter the market place and remain very expensive compared to a conventional vehicle. For example, the ARB estimated the incremental cost of a PHEV to be \$25,000 per vehicle, a Type I BEV to be \$35,000 - \$65,000 per vehicle, and a Type I.5 BEV to be \$40,000 to \$80,000 per vehicle<sup>3</sup>. Because the previous AFVIP program was oversubscribed, and we expect even more light-duty

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<sup>1</sup> Initial Statement of Reasons 2008 Proposed Amendments to the California Zero Emission Vehicle Program Regulations, California Air Resources Board, February 8, 2008, <http://www.arb.ca.gov/regact/2008/zev2008/zevisor.pdf>.

<sup>2</sup> Ibid

<sup>3</sup> Ibid

zero-emission and plug-in hybrid vehicle introductions in the coming years, we believe the full \$5 million will be needed to support the light-duty introduction of this innovative technology.

The ARB has proposed \$5 million funding for the zero-emission and plug-in hybrid light-duty vehicle rebate project. Ford supports this funding as well as the maximum project funding concept that the ARB has proposed for the various vehicle classes included in the project. However, at \$20,000 per vehicle, commercial-vehicles in the light-duty program could quickly overwhelm the \$3 million maximum funding for this vehicle class, leaving less than \$2 million for passenger cars and neighborhood electric vehicles. This is less funding than the previously oversubscribed AFVIP funding, whereas it should be more.

Ford supports incentives for zero-emission commercial vehicles, but believes that it would be more appropriate to include this class of vehicle in the Hybrid Truck and Bus Voucher Incentive Project (HVIP), rather than the light-duty rebate program. The proposed HVIP funding of \$25 million and per vehicle vouchers of \$10,000 – \$35,000 are more in line with the \$20,000 per vehicle proposed for a zero-emission commercial vehicle. Furthermore, combining the zero-emission commercial vehicle with the HVIP will allow the program to target the same medium- and heavy-duty customers. By targeting the same customer, it may encourage the purchase of a zero-emission commercial vehicle, rather than a hybrid commercial vehicle.

Ford recommends that the Zero-Emission and Plug-In Hybrid Light-Duty Vehicle Rebate Project only provide incentives for light-duty vehicles by moving the zero-emission commercial vehicle incentive the Hybrid Truck and Bus Voucher Incentive Program.

### **Plug-in Hybrid Vehicles**

The AQIP Funding Plan proposes a \$3,000 rebate for a plug-in hybrid light-duty vehicle. This is a reduction from the \$5,000 per vehicle incentive under the existing AFVIP program. Plug-in hybrids are currently not available from any major original equipment manufacturer and the costs for these vehicles remain very high. The ARB has estimated that the incremental cost of a plug-in hybrid will be \$25,000 in the 2012 – 2014 model year.<sup>4</sup> Even with other incentives, for example, the federal tax rebate, there would still be a substantial cost for the consumer to purchase a plug-in hybrid vehicle. It is pre-mature to lower the incentive value for plug-in hybrid vehicles, because the costs remain high and there is no experience or data on the market

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<sup>4</sup> Ibid.

for these vehicles. Ford recommends that the rebate for a plug-in hybrid vehicle be retained at \$5,000 per vehicle for the 2009-10 funding period.

### **Neighborhood Electric Vehicles (NEVs)**

The AQIP Funding Plan proposes a \$1,500 rebate for neighborhood electric vehicles. NEVs have been in the market since 2001. Although there is only a niche market, these vehicles have been and continue to be commercially available and viable. This is not the case for the other vehicles in the AQIP program. Type I, or better, zero-emission vehicles and plug-in hybrid vehicles are in the demonstration phase and are not available on a commercial scale due to the need to overcome significant technological and cost barriers. The cost to produce these more advanced vehicles is not supported by the market, which is why incentives in the early introduction of these pre-commercial technologies are critical. Because NEVs have been proven in the market place, Ford recommends that the AQIP incentive for these vehicles be eliminated, leaving more funds available for new technology vehicles that are just entering the market like plug-in hybrids and Type I or better zero-emission vehicles.

### **Conclusion**

Ford supports the ARB's goal for a sustainable zero emission vehicle transportation system. We support the use of incentives to encourage the purchase of zero-emission technology, especially critical during the early introduction phases. The Air Quality Improvement Program will help this effort to place vehicles in-use and provide an opportunity to further develop the zero emission vehicle technology.