



Electric Cars For Everyone

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Via Email
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear ARB Staff,

Ample would like to thank the California Air Resources Board (CARB) for the opportunity to provide feedback on the "Electricity as a Transportation Fuel" discussion paper. We appreciate the opportunity to participate in the process and provide the following comments for your consideration.

Background

Ample, a privately-owned San Francisco based company, has developed an Autonomous Battery Swap (ABS) solution that permits the rapid swapping of EV batteries. The ABS solution has a number of advantages including:

- Rapid battery swapping regardless of battery capacity.
- Cost-effective and rapid deployment of the infrastructure needed for swapping.
- Easy installation without any fixed infrastructure.
- Infrastructure can be rapidly and profitably scaled.
- Permits high utilization of EVs for fleets.

EV adoption cycle

EV adoption is still early in its cycle and encouraging innovation is important to its long-term success. Mass adoption of EVs will require solutions that meet the needs of many different segments - urban and suburban dwellers, commercial and autonomous fleets, and car and lightweight trucks. Although current charging solutions meet the needs of some of these segments, continued innovation will be needed to create a viable solution for all of them.

Elimination of battery switch category

Increasing the rate of EV adoption will assist LCFS in achieving its CI goals. Although there have been no applications for battery switch in the last six years, battery switch is a viable solution and ARB's continued support of it will be important to fostering the innovation needed for it to achieve commercial deployment and success. Eliminating the battery-switch category will stifle innovation and put it at a commercial disadvantage to other methods of charging EVs.

In conclusion, we believe that elimination of the battery-switch category is unnecessary and will have a negative impact on EV infrastructure innovation and thus on EV adoption overall. We hope that ARB will continue to support the battery-switch category.

Please feel free to contact me if you wish to discuss this in more detail.

Warm regards,

A handwritten signature in blue ink, appearing to read 'Khaled Hassounah', written in a cursive style.

Khaled Hassounah

CEO
