

Recent Plug-In Hybrid Incentives, Legislation, Regulation, and Programs In California.



**California
Electric
Transportation
Coalition**

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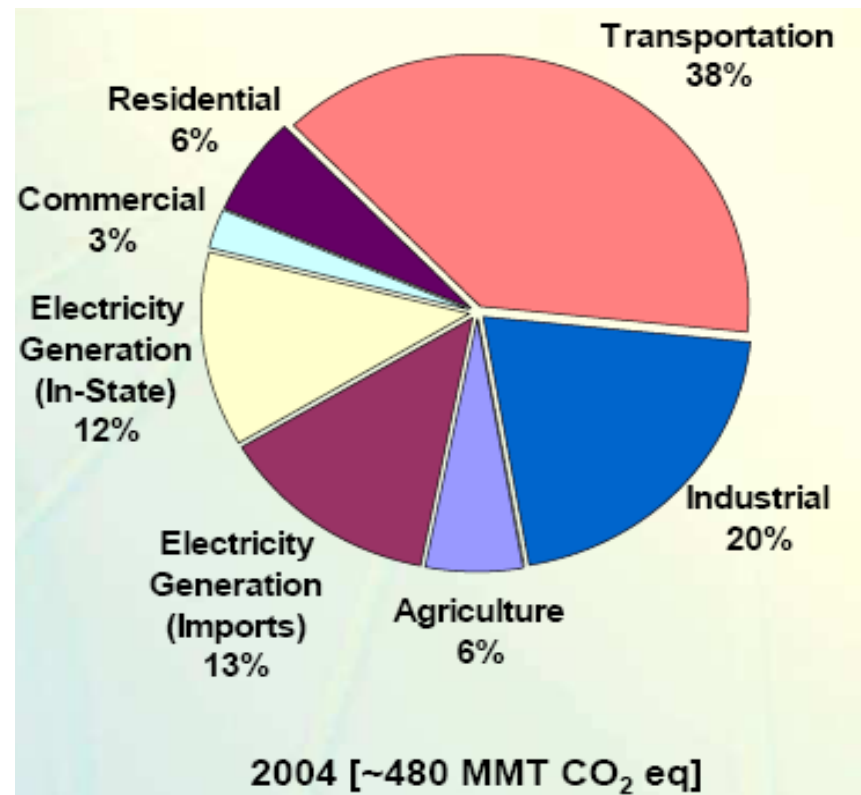
California Electric Transportation Coalition

Recent PHEV-Related Actions

- AB 32: California Global Warming Solutions Act.
- California Alternative Fuels Plan.
- Zero-Emission Vehicle Regulation.
- California Low Carbon Fuel Standard.
- Limited-Term \$5,000 Incentive for OEM PHEVs.
- AB 118: Funding for Alternative Fuel Vehicles.
- AB 236: California State Fleet Procurement.
- California Plug-In Hybrid Research Center.

Assembly Bill 32: California Global Warming Solutions Act

- Comprehensive GHG reduction structure; broad authority.
- Reduce to 1990 levels by 2020.
- Mandatory emissions reporting.
- Direct regulation of GHG emissions from all sources.
- Market mechanisms; “cap and trade”.



California Alternative Fuels Plan

- Full-fuel-cycle analysis of all fuels, specific recommendations.
- Goals: 9% in 2012, 11% in 2017, 26% in 2022.
- Displacement of 4 billion gge in 2020 (20%).
- Electricity can make a large contribution to this goal, with corresponding large reductions in GHG and air pollution.

California Energy Commission



California Air Resources Board



CEC “well-to-wheels” Analysis - Impacts of Electric-Drive Vehicles

	PHEV-20	Battery Electric Car	Forklift vs. LPG
GHG	48% reduction	72% reduction	65% reduction
Petroleum	60% reduction	99.8% reduction	99.8% reduction
Criteria Pollutants	62% reduction	96% reduction	96% reduction
Toxics	59% reduction	96% reduction	85% reduction

Key Alternative Fuels Plan Recommendations for ET

- Special rates for electricity used in transportation.
- Utility ratebase recovery of ET charging and metering equipment.
- Allow utilities to earn carbon reduction credits for investments in ET.
- Support advanced battery manufacturing plants.
- Provide financial incentives.
- Conduct consumer and market niche education.

Zero-Emission Vehicle Regulations

- ARB staff proposal that OEMs can make PHEVs to meet some of their ZEV requirements.
- Up to 25,000 PHEVs per year beginning in 2012.
- Up to 28,000 PHEVs per year beginning in 2015.
- Allows PHEVs with “All-Electric Range” and “Blended”.
- Higher credits for greater use of electric power (AER).

California Low Carbon Fuel Standard

- Reduce carbon intensity of transportation fuel by 10% by 2020.
- Expected to replace 20% of transportation fuel consumption with lower-carbon fuels.
- Petroleum producers are main point of regulation.
- Electricity used for transportation can generate credits than can be sold.
- Includes both on-road and off-road electric transportation technologies.
- May be able to sell these credits into other AB 32 markets. Additional value stream for ET.

Limited-Term \$5,000 Incentive for OEM PHEVs

- Good News: New \$5,000 per vehicle incentive for PHEVs.
- 5/24/07 – 3/31/09 eligibility window.
- Bad News: there are no eligible PHEVs today.
- Limited to ARB-Certified OEM vehicles.
- But this may indicate future CA incentive levels for PHEVs.

AB 118: Funding Source for Alternative Fuels and Vehicles

- Stable funding source, \$205 million annually through 2015.
- Competitive grants, loans, & loan guarantees.
- Includes: R,D,&D, commercialization, and deployment of alt fuels, vehicle technologies (both on-road and off-road), and infrastructure.
- Broad references to electric transportation purposes.
- Funded by small increases in annual vehicle, boat, and smog fees.

Assembly Bill 236: California State Fleet Procurement

- Reforms criteria for state fleet procurement (and some local fleets).
- Vehicles ranked by: GHG emissions, criteria air emissions, and petroleum use on full-fuel cycle basis, and life-cycle cost.
- Vehicles procured would have to be “best-in-class”.
- If fuel infrastructure not available or planned, can’t purchase that vehicle.
- Expected to benefit electric-drive vehicles.

California Plug-In Hybrid Vehicle Research Center

- UC Davis Institute of Transportation Studies.
- \$3 million from CEC, \$1.5 million from ARB.
- Prepare a PHEV Research Roadmap.
- Consumer Use and Demand for PHEVs.
 - 10 PHEVs loaned to 100 households for 6-8 weeks.
- Component and Charging Technology Evaluation.
- Lifecycle Emissions and Social-Cost Analysis.



Conclusion

- California is committed to Plug-In Hybrids and other electric transportation technologies.
- Large reductions in GHG, air pollution, petroleum dependence.
- CA will use multiple public policy tools to achieve this goal.
- More programs to come in the future.
- Similar tools could be employed in other states.
- The many stakeholders need to work together.
- CalETC wants to work with you.