

Zero Emission Vehicles

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STEVE DOUGLAS

AUTO ALLIANCE

DRIVING INNOVATION®

BMW Group

Jaguar Land Rover

Porsche Cars NA

Chrysler Group LLC

Mazda

Toyota

Ford Motor Company

Mercedes-Benz USA

Volkswagen Group

General Motors

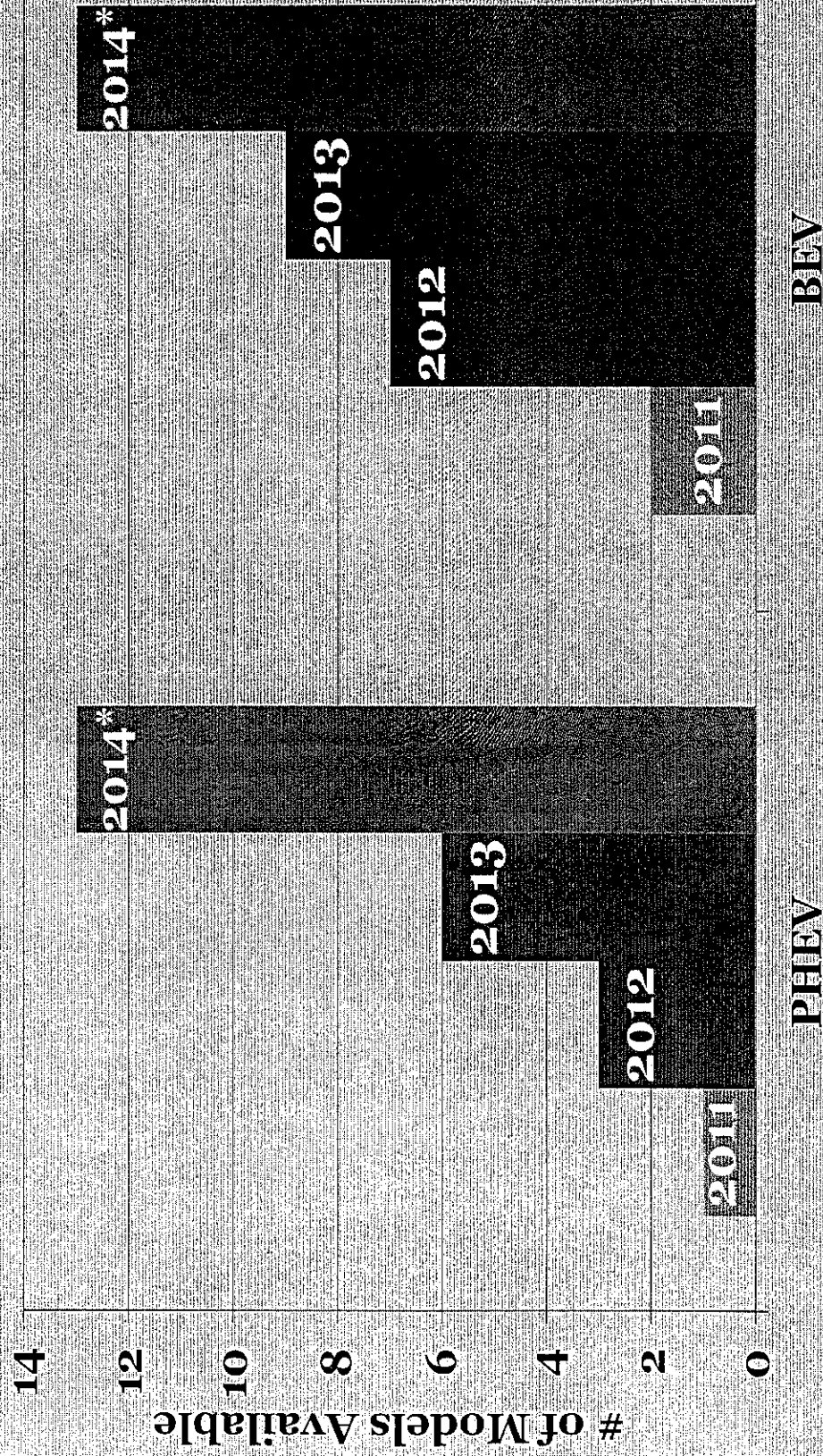
Mitsubishi Motors

Volvo Cars Corp

Steven Douglas
13-9-4

Plug-In and Battery Electric Vehicles

2

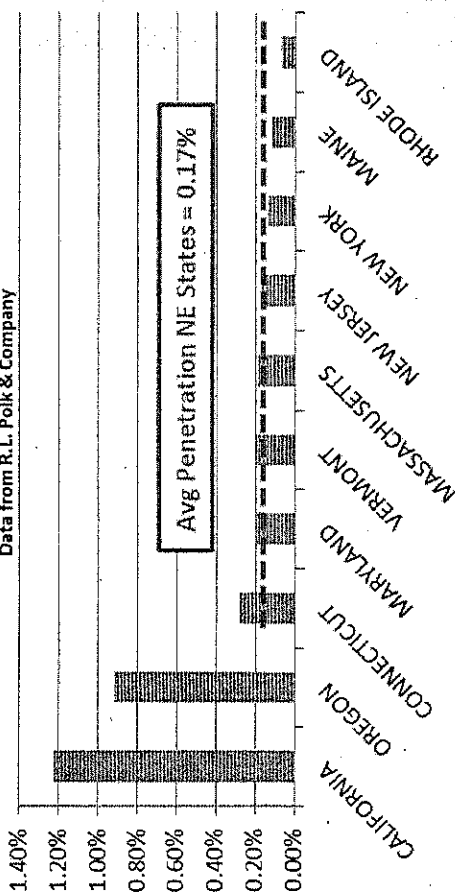


* 2014 based on reports from Automotive News

BEV and PHEV Sales Rates

2013 New BEV Sales as % of LDV

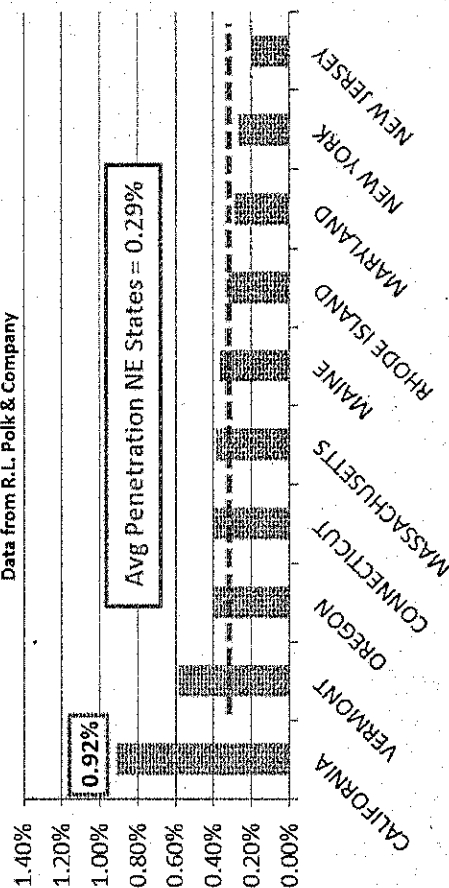
Data from R.L. Polk & Company



Requirement	2018	2019	2020	2021
All BEV100	1.33%	2.67%	4.00%	5.33%

2013 New PHEV Sales as % of LDV

Data from R.L. Polk & Company



Requirement	2018	2019	2020	2021
PHEV20	5.0%	6.0%	7.0%	8.0%

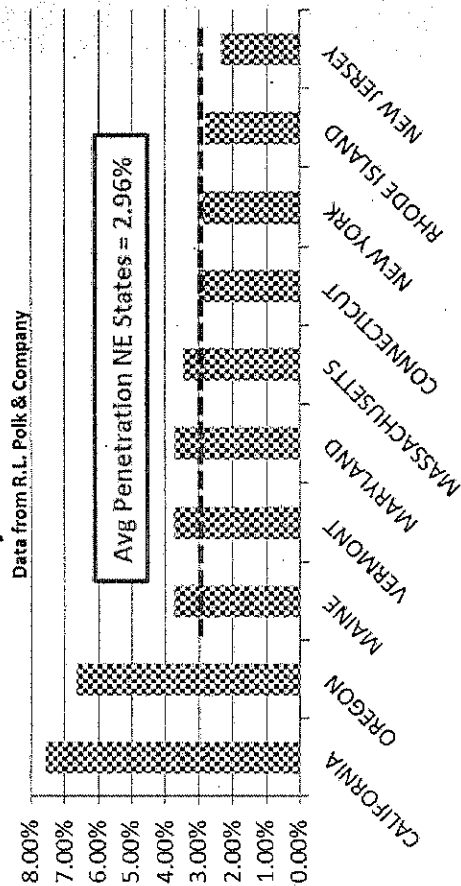
Hybrid Sales

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CA vs. NE Hybrid Sales

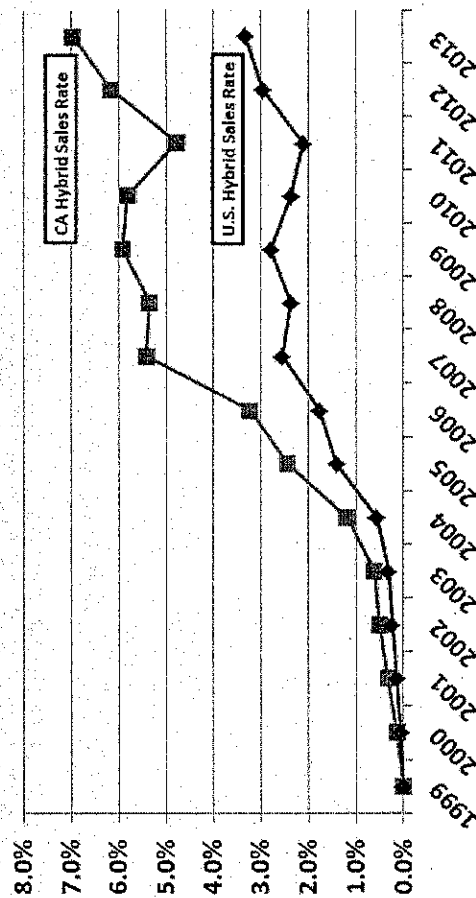
CA vs. U.S. Hybrid Sales

2013 New Hybrid Sales as % of LDV



CA vs. US Hybrid Sales Rate

Data from R.L. Polk & Company



Observations

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- Automakers investing \$10s of billions to develop, produce, and promote ZEV technologies
- CA investing heavily in promotion of ZEV technology
 - incentives, infrastructure, public fleet, and education
- ZEV penetration rates improving, but a long way to go even in CA
- Current ZEV regulations based on 2011 data, prior to significant BEV and PHEV introductions

Consider

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- 2014: Review 2018 and later ZEV requirements including:
 - Technology assessment
 - Sales and use of BEVs and PHEVs in CA and other ZEV states
- 2015: Report to board with findings and recommended changes, if necessary