

Utility Perspective on EV Charging

Transportation Electrification

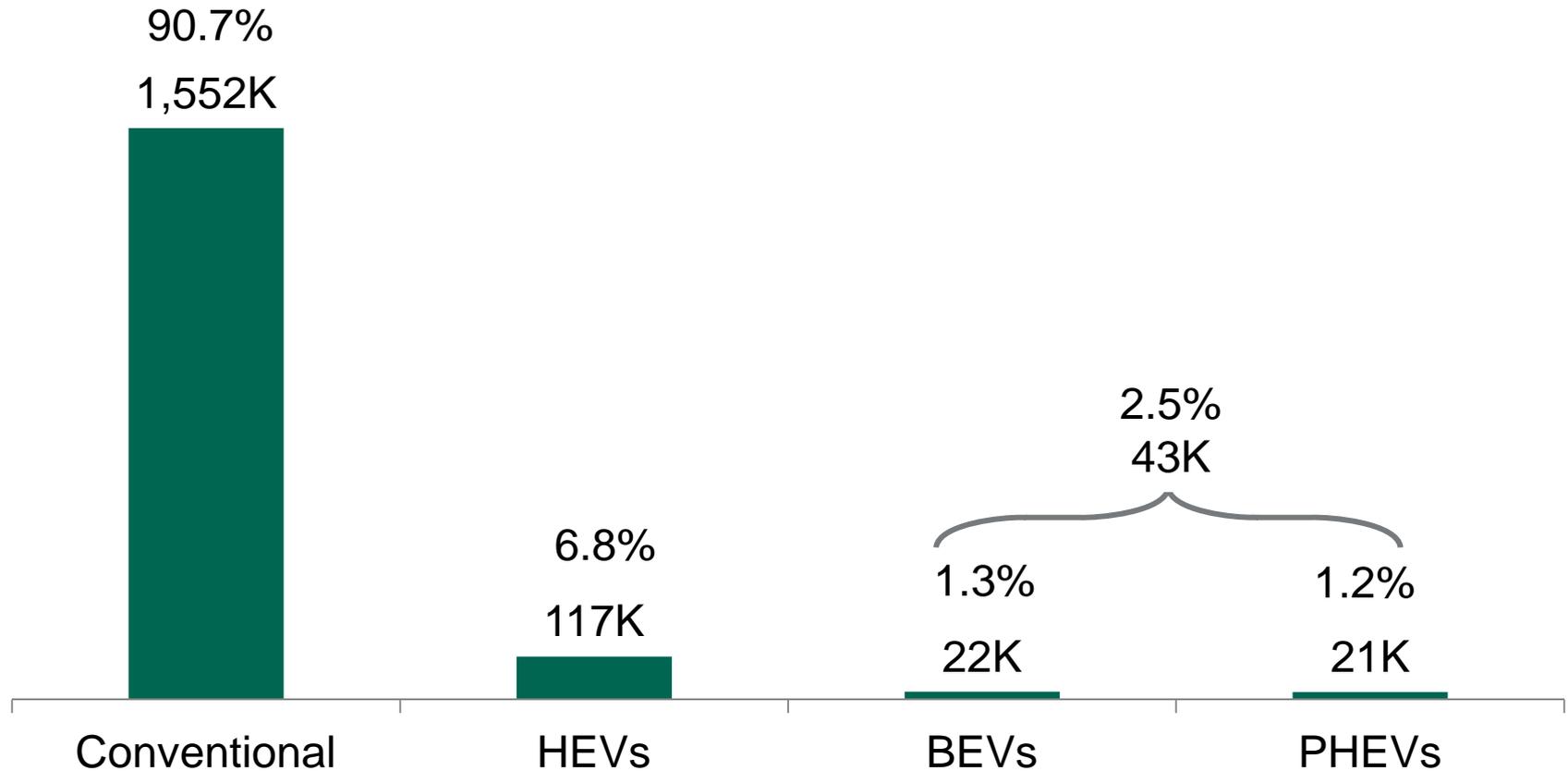
Ed Kjaer, Director

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The EV market is still nascent, even in California

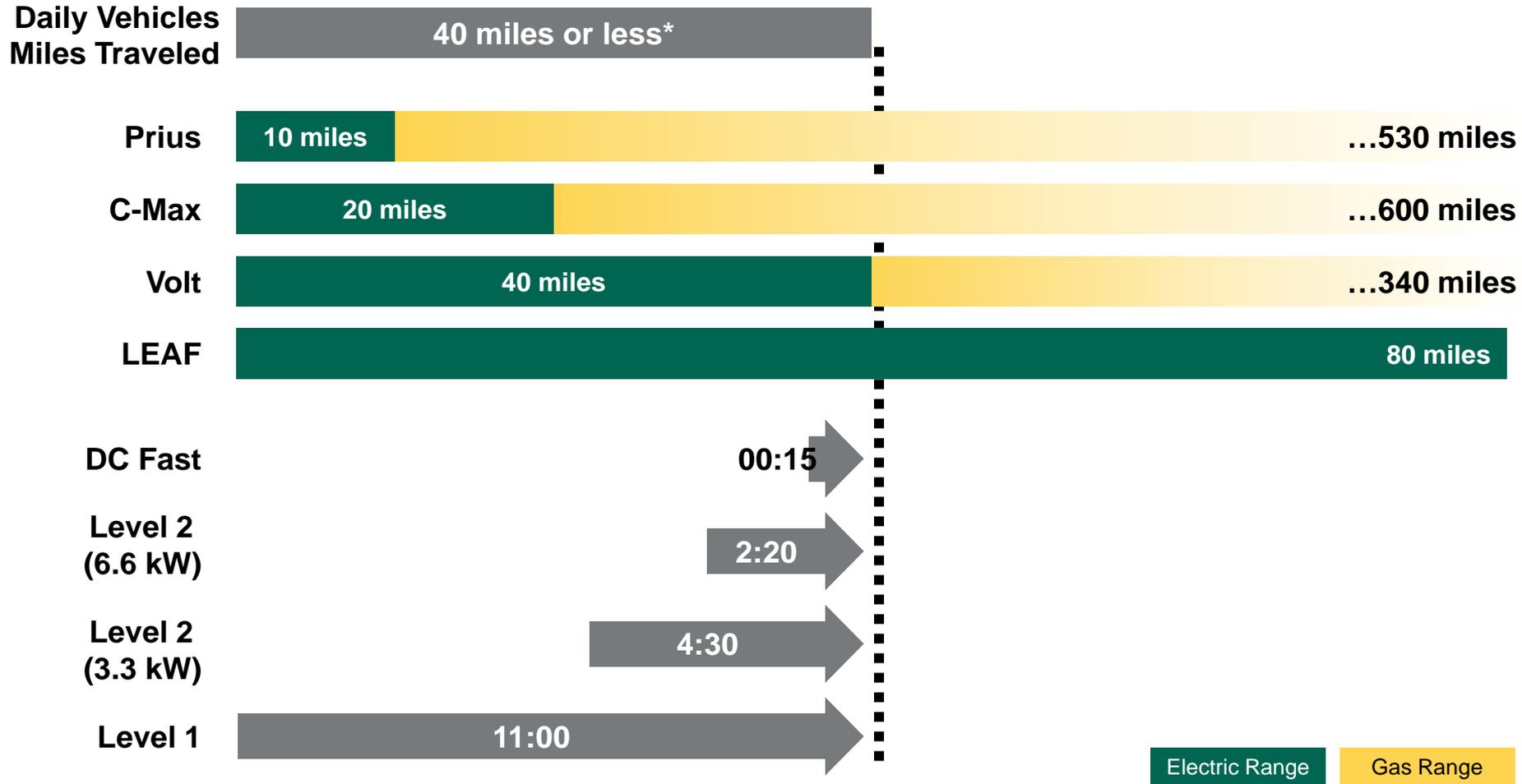
2013 California Sales (New)

Total New Vehicle Sales: ~ 1,700 K



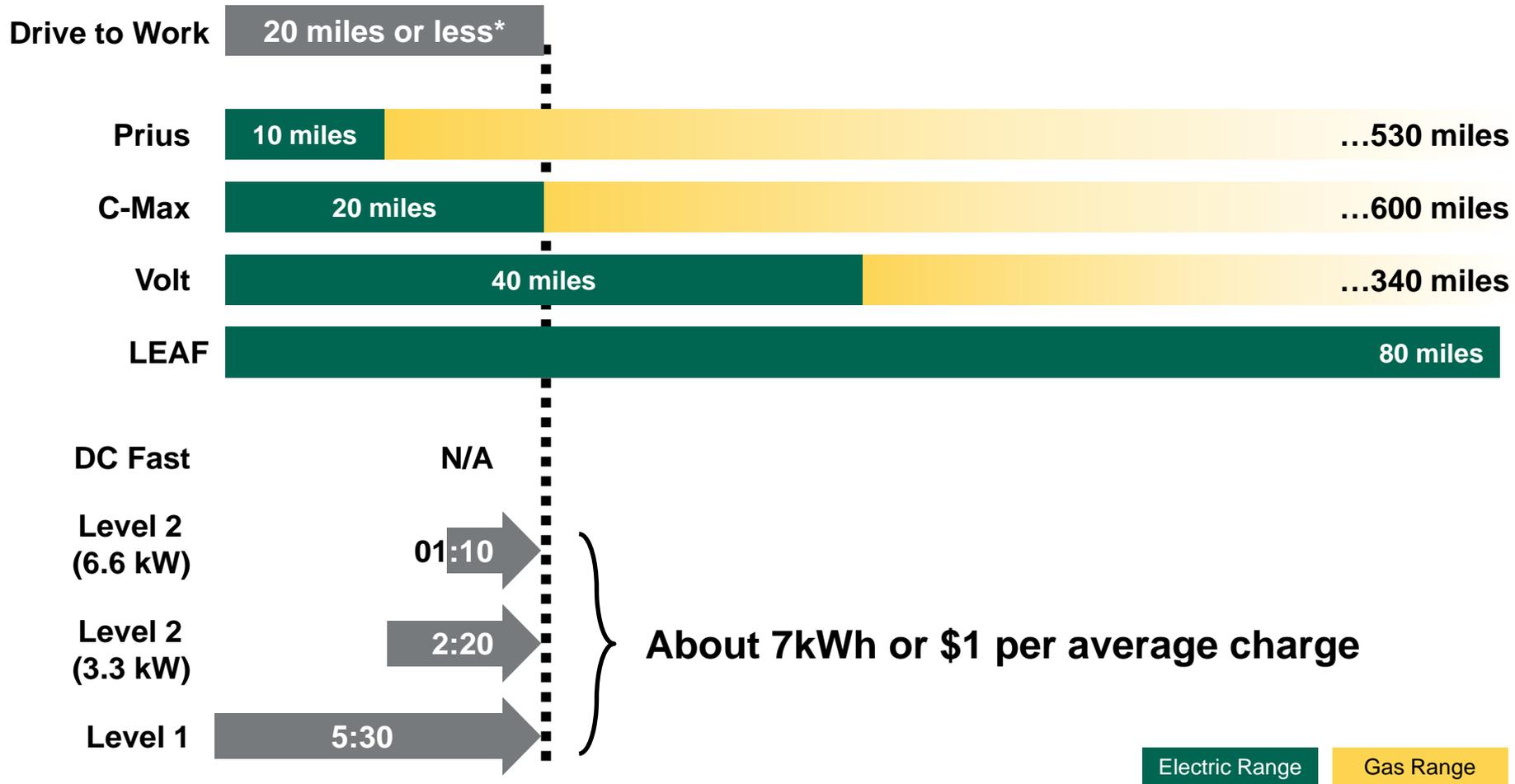
Source: EPRI

Daily VMT



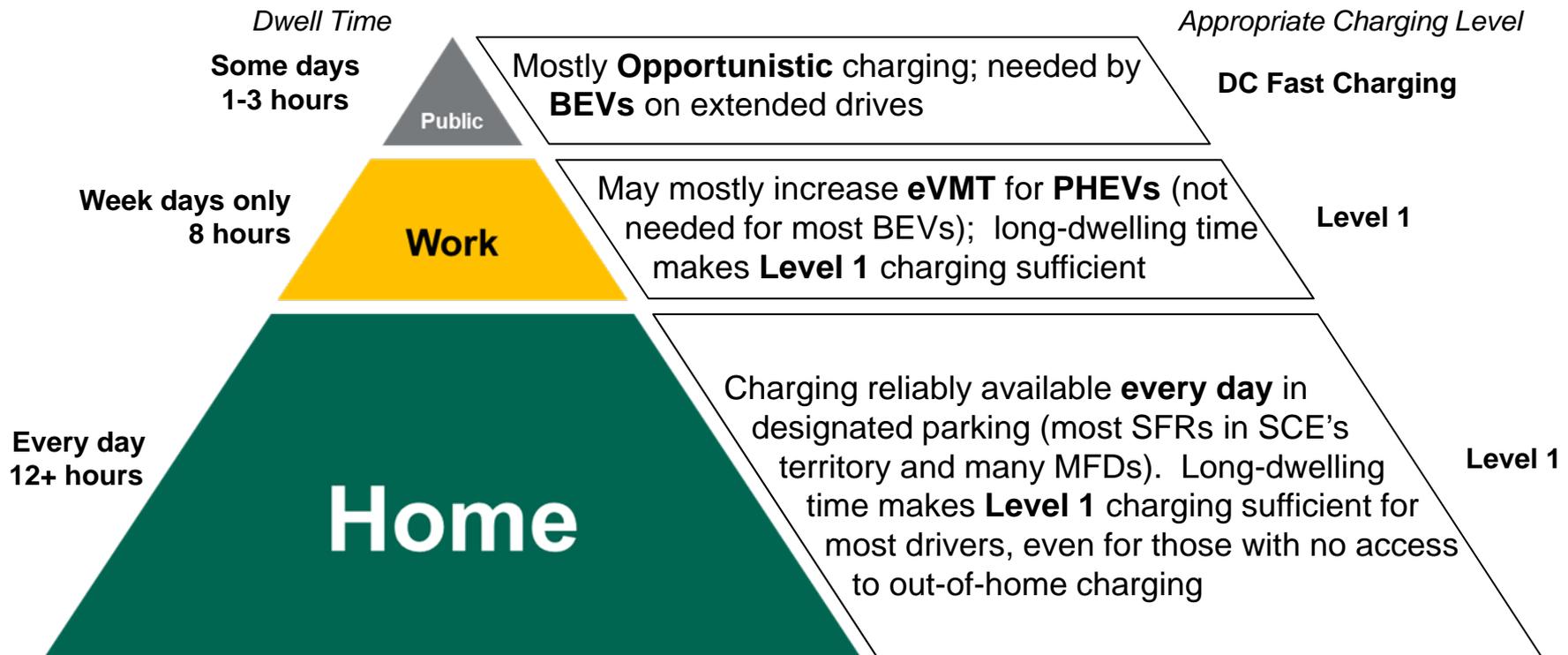
*For more than 80% of the United States population, the daily trip to work is less than 20 miles, with 60% driving 10 miles or less; the national average of daily miles driven is only 29 miles (including work commute, shopping, etc.) Source: National Household Travel Survey, www.nhts.ornl.gov.

Daily Commute to Work



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For most EV owners, home is the only possible location for daily charging



As most PHEVs can only charge at Level 1 or Level 2 (3.3 kW), the required charging time makes it impractical to rely on public charging for daily charging (other than opportunistically, if charging costs less than at home). DC fast charging connection is for BEVs, only