



Revised PEV Forecast

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DAWG Meeting
November 8, 2017

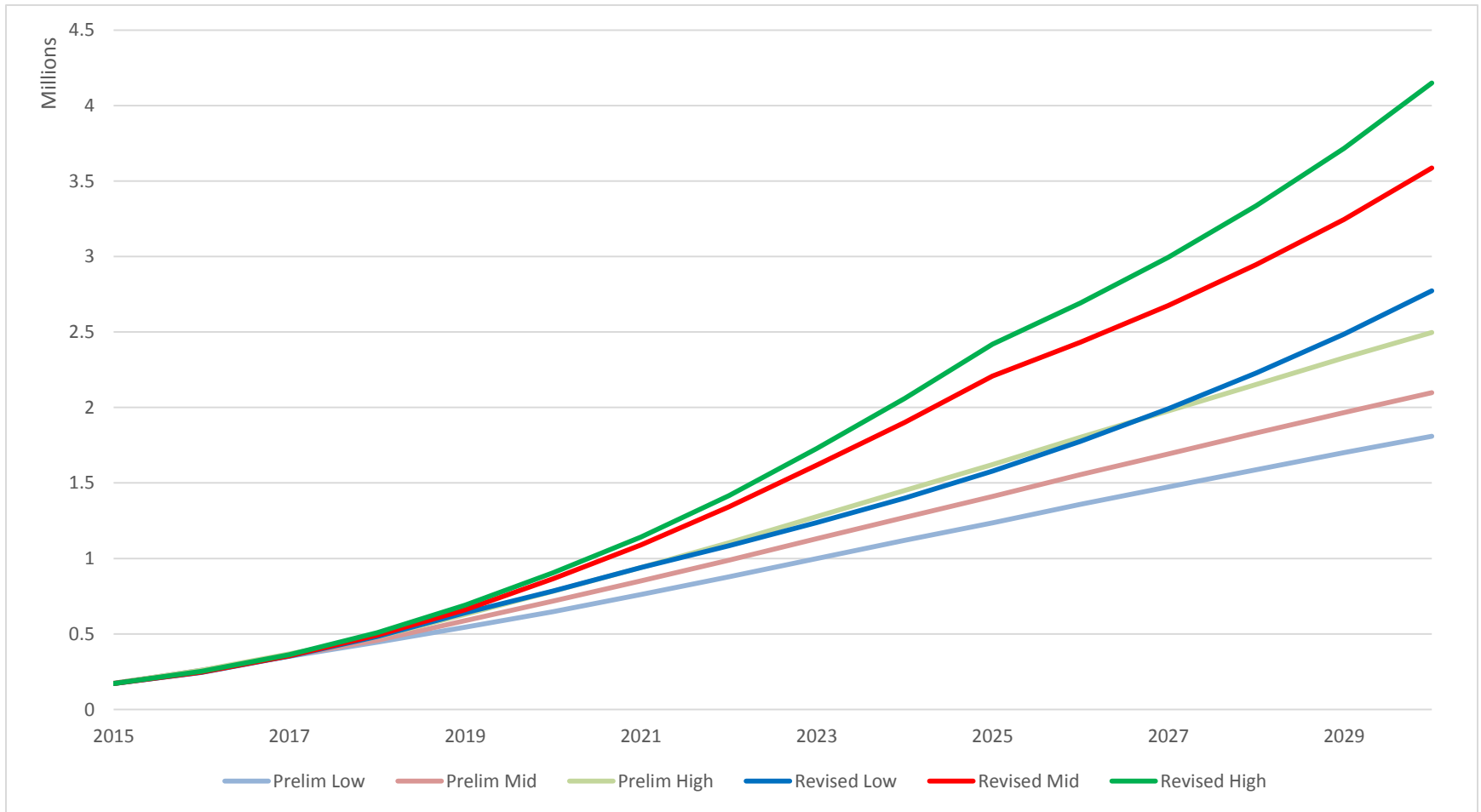


PEV Scenarios Considered

	PEV SCENARIOS				
INPUTS	Low	Mid	High	Aggressive	Bookend
PREFERENCES					
Consumers' PEV Preference	Constant at 2017 level	Increase with PEV Market Growth	Increase with PEV Market Growth	Increase with PEV Market Growth	Increase with PEV Market Growth
INCENTIVES					
Federal Tax Credit	Eliminated after 2019	Decreasing starting in 2019	Decreasing starting in 2019	Constant Through 2030	Constant Through 2030
State Rebate	To 2020	To 2025	To 2025	To 2030	To 2030
HOV Lane Access	To 2019	To 2025	To 2025	To 2025 for PHEV / 2030 for EV	To 2025 for PHEV / 2030 for EV
ATTRIBUTES					
Availability of PEVs (in 2030)	PEV models available in 11 of 15 CEC LDV classes	PEV models available in 11 of 15 CEC LDV classes	PEV models available in 11 of 15 CEC LDV classes	PEV models available in 13 of 15 CEC LDV classes	PEV models available in all CEC LDV classes
Vehicle / Battery Price (by 2030)	PEV prices based on battery price declining to ~ \$120/kwh	PEV prices based on battery price declining to ~ \$100/kwh	PEV prices based on battery price declining to ~ \$89/kwh	PEV prices based on battery price declining to ~ \$73/kwh	PEV prices reach parity with gasoline vehicles
Avg. Range (2030)	~ 230 miles	~ 230 miles	~ 270 miles	~ 270 miles	~ 270 miles
Refuel Time (2030)	15 - 21 min	15 - 21 min	10 - 16 min	10 - 16 min	Same as Gasoline
Time to Station (2030)	7 - 8 min	Same as gasoline	Same as gasoline	Same as gasoline	Same as gasoline by 2025
FORECAST RESULT					
PEV STOCK in 2030	2.6 mil	3.3 mil	3.8 mil	5.3 mil	5.9 mil

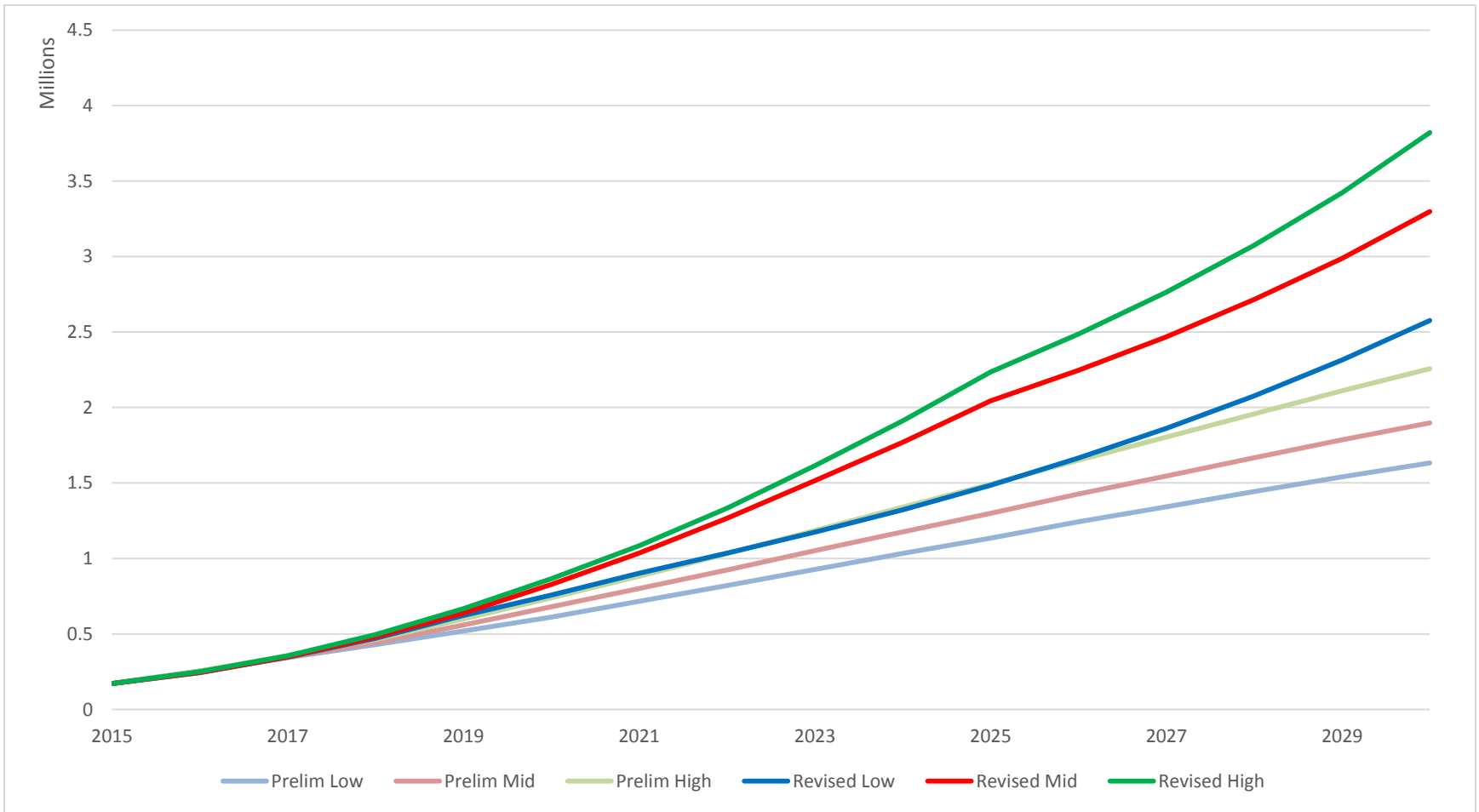


ZEV Forecast: How Did It Change?



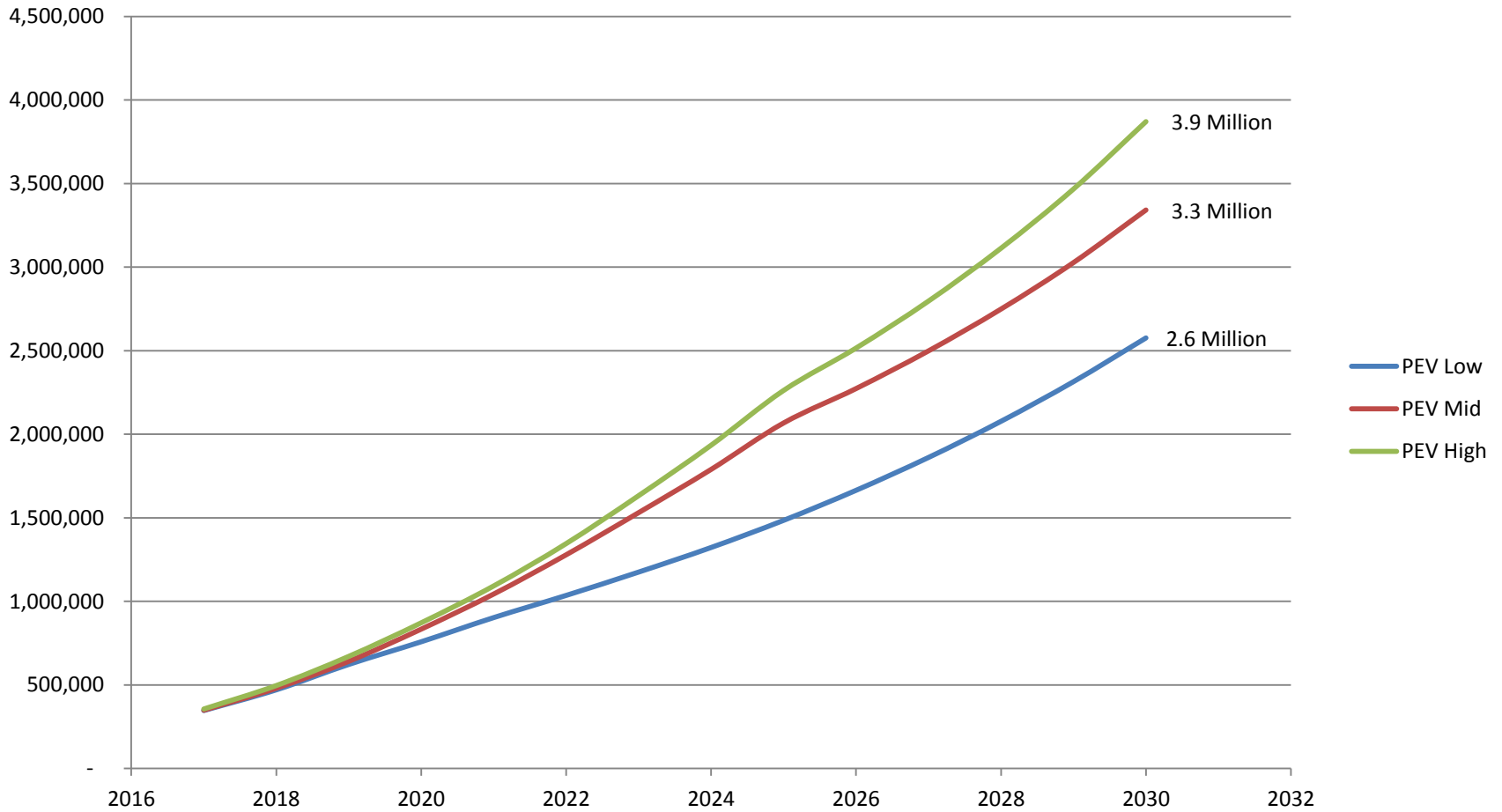


PEV Forecast: How Did It Change?



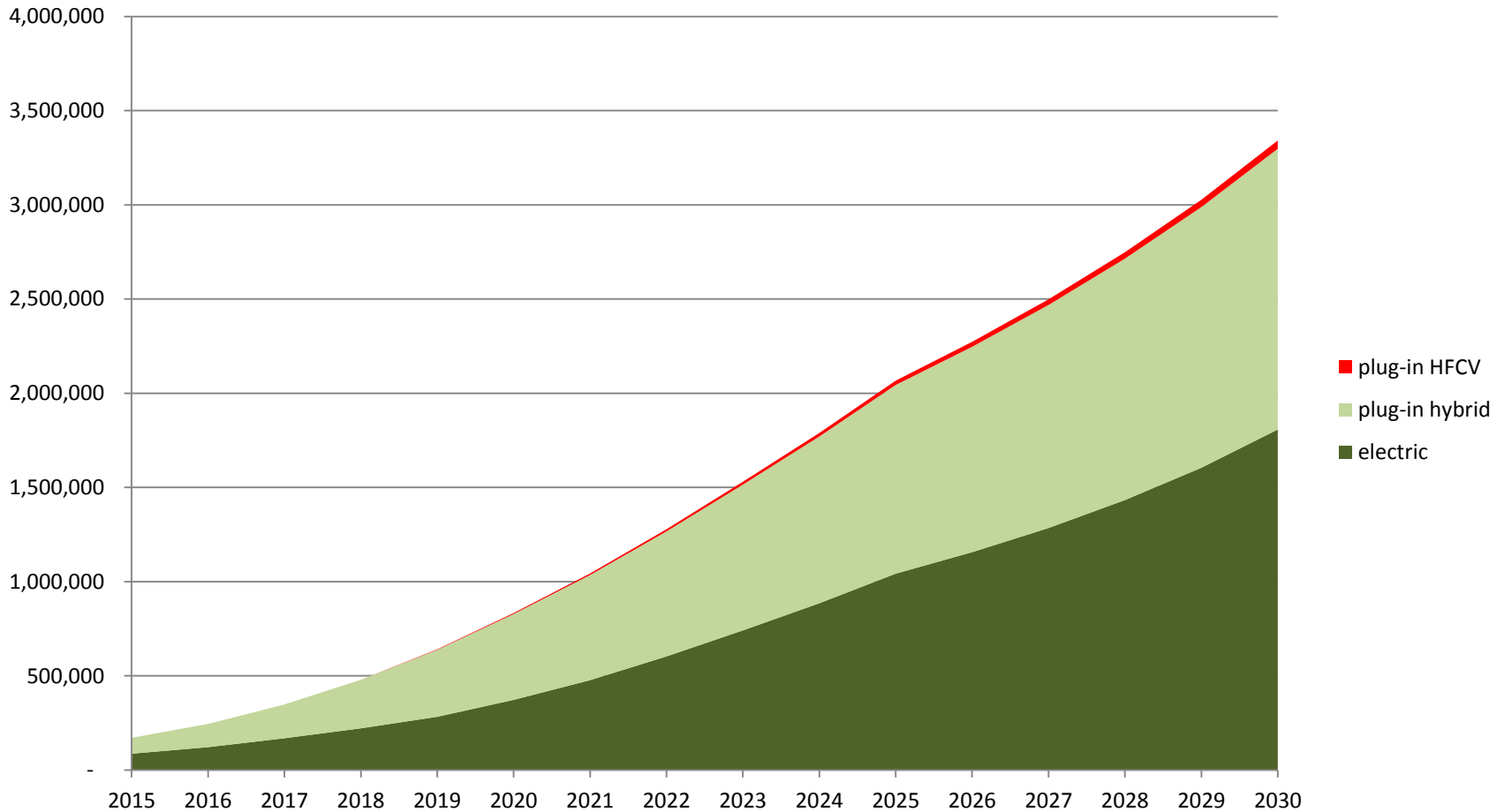


PEV Forecast



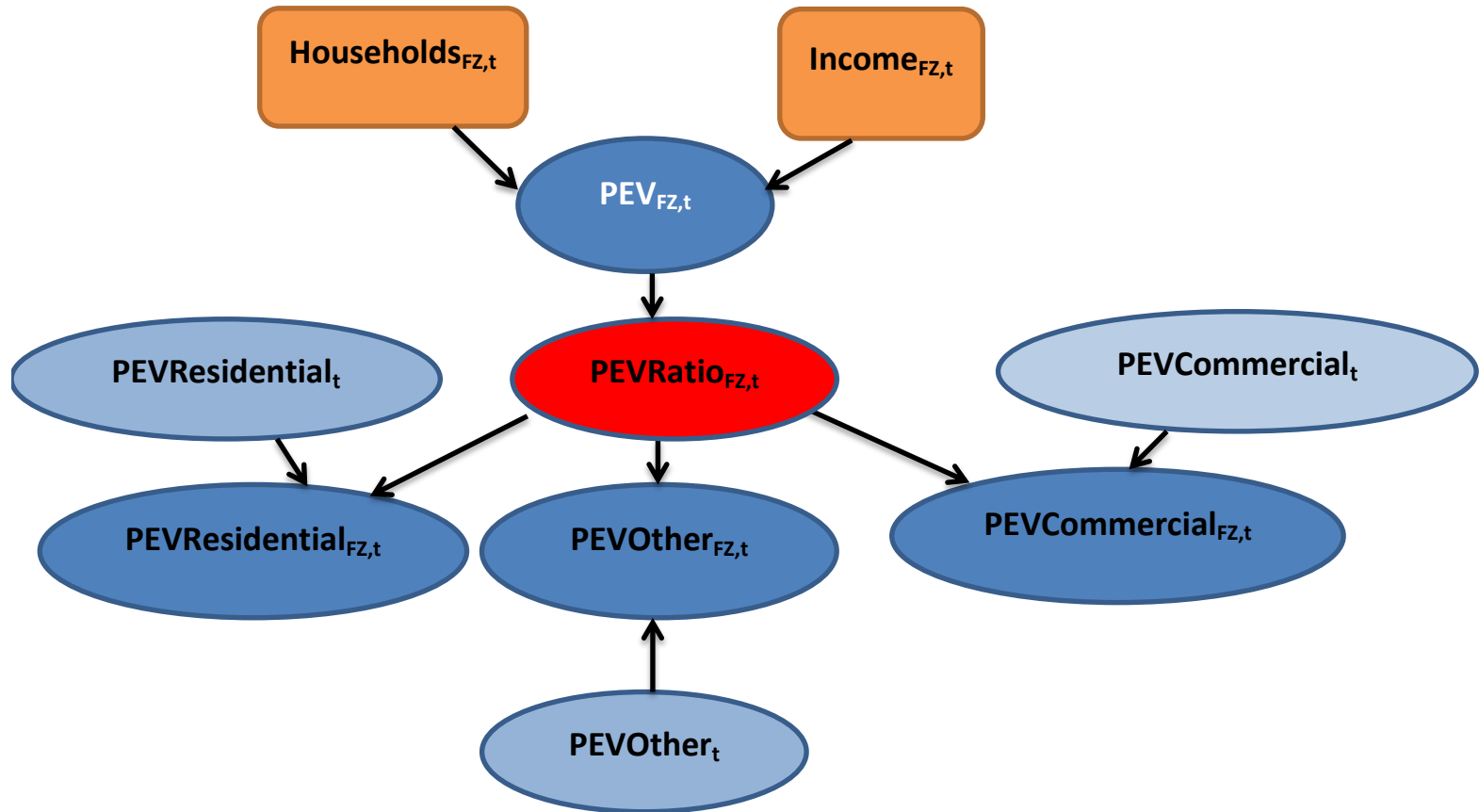


PEV Forecast by Technology, Mid Case



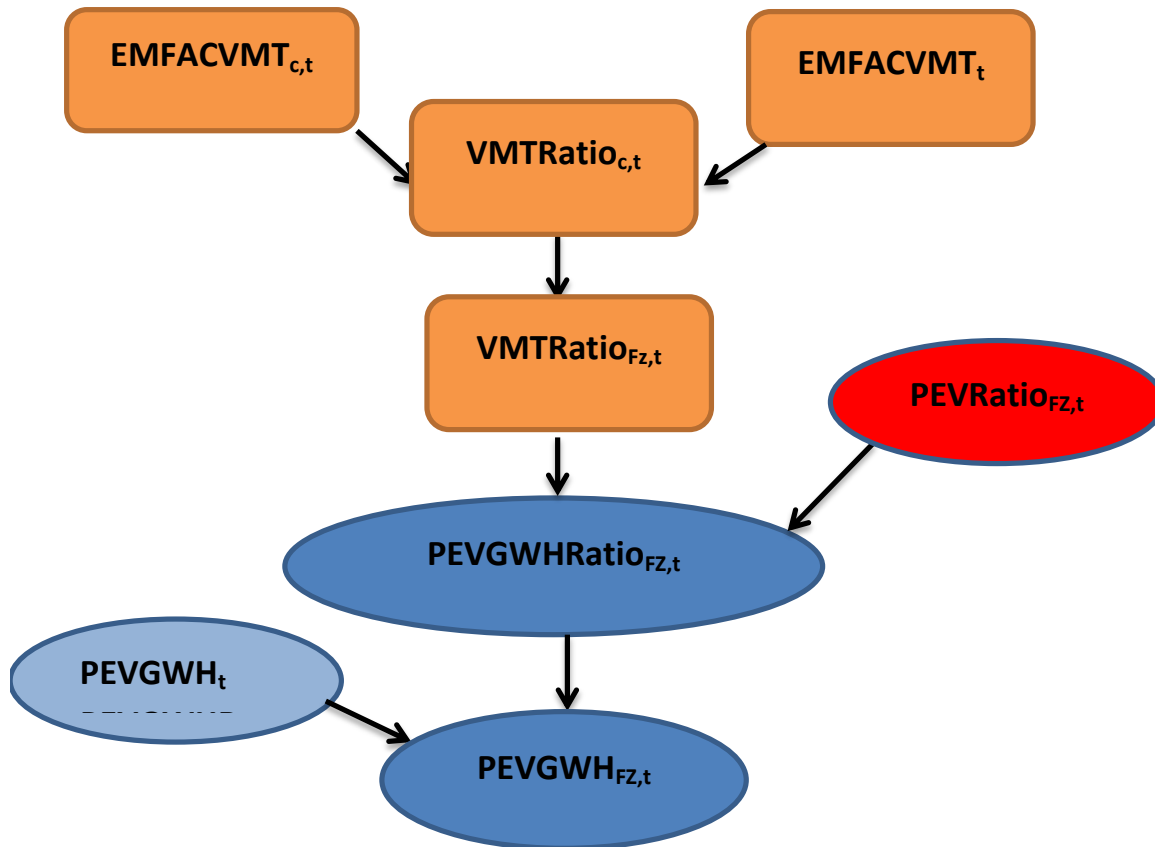


From Statewide BEV & PHEV Forecast to Forecasting Zones (FZ)



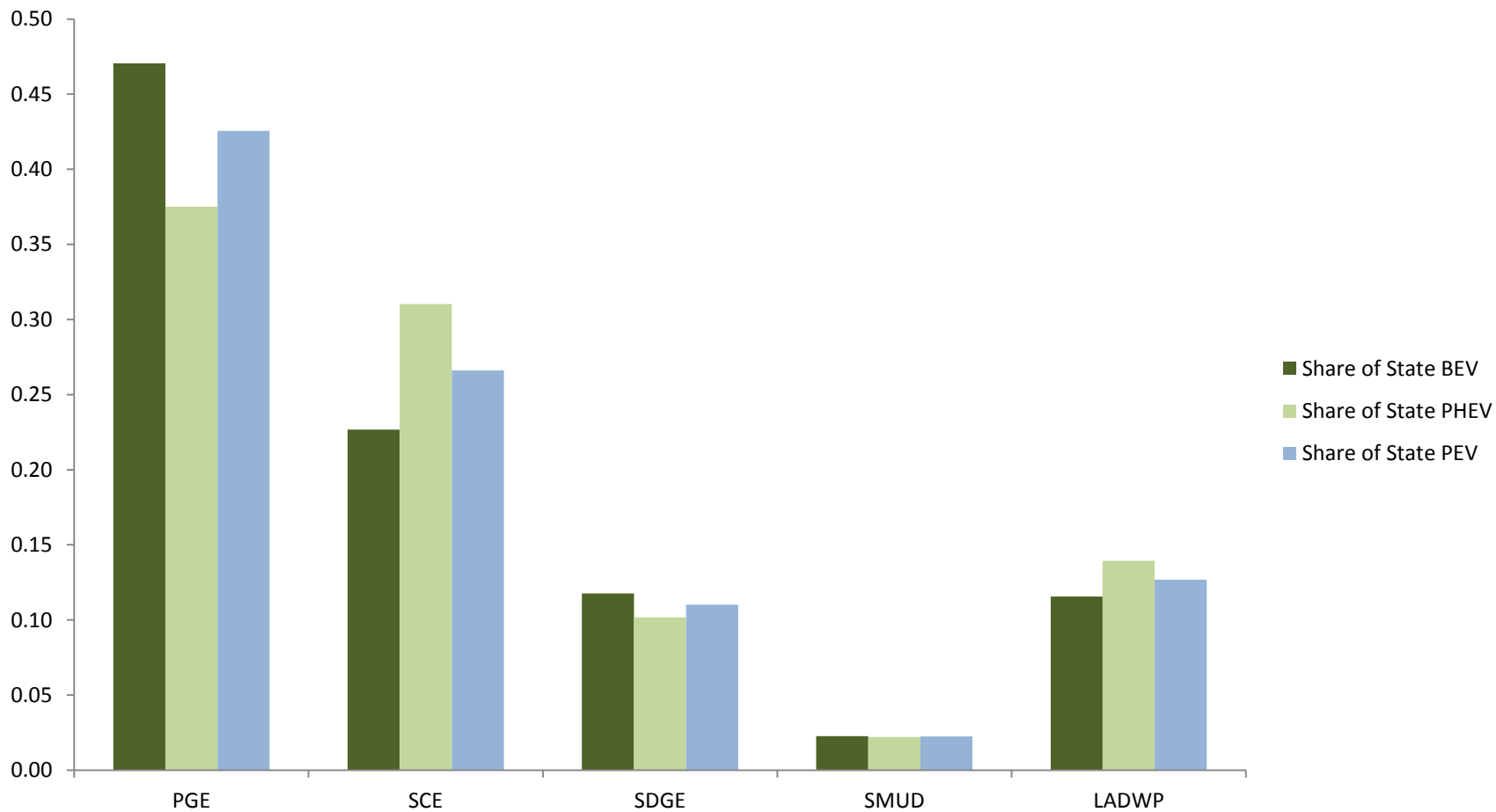


From Statewide PEV Consumption to Forecasting Zones (FZ)





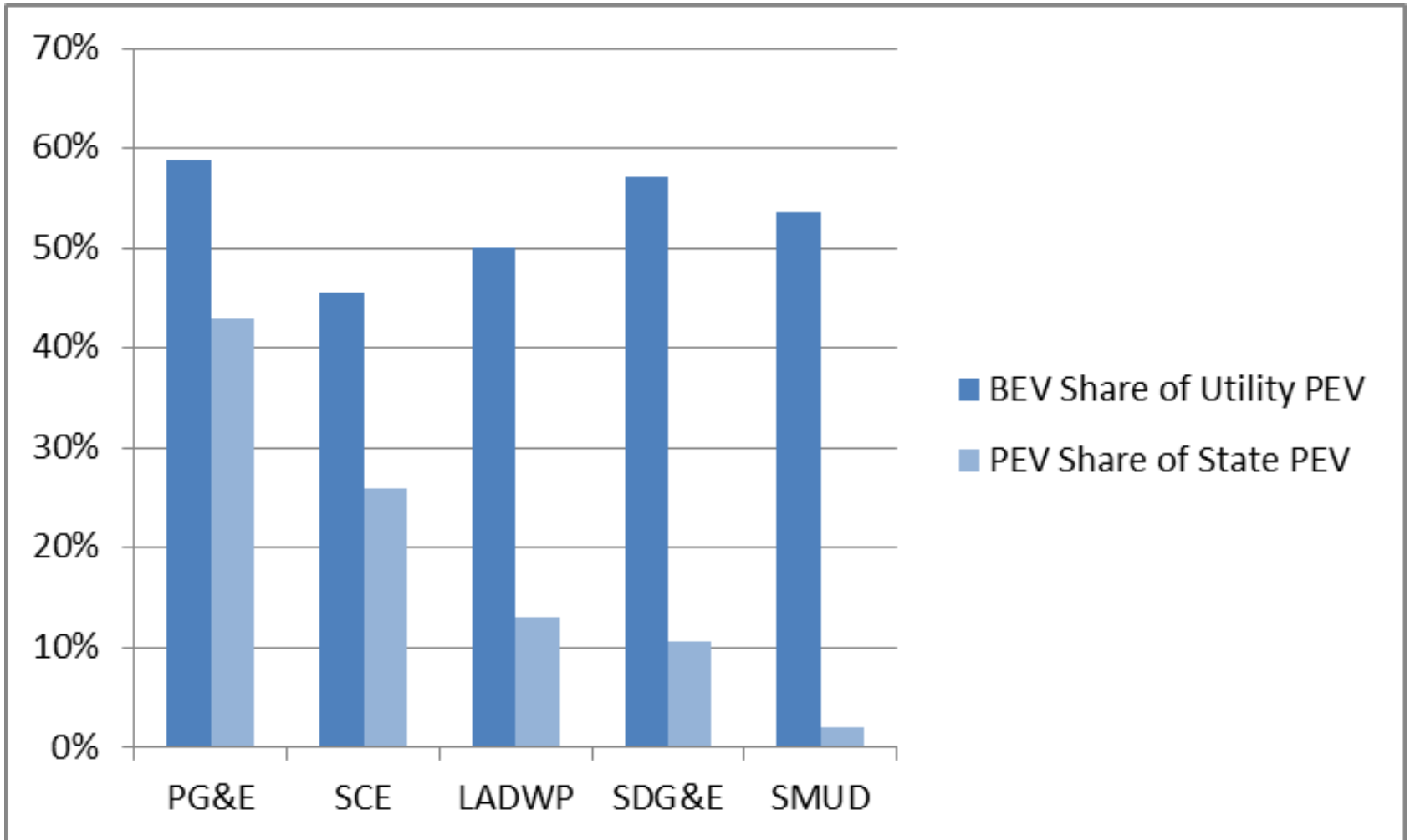
Share of 2015 State PEVs, by Utility



Source: California Energy Commission Analysis of DMV Data



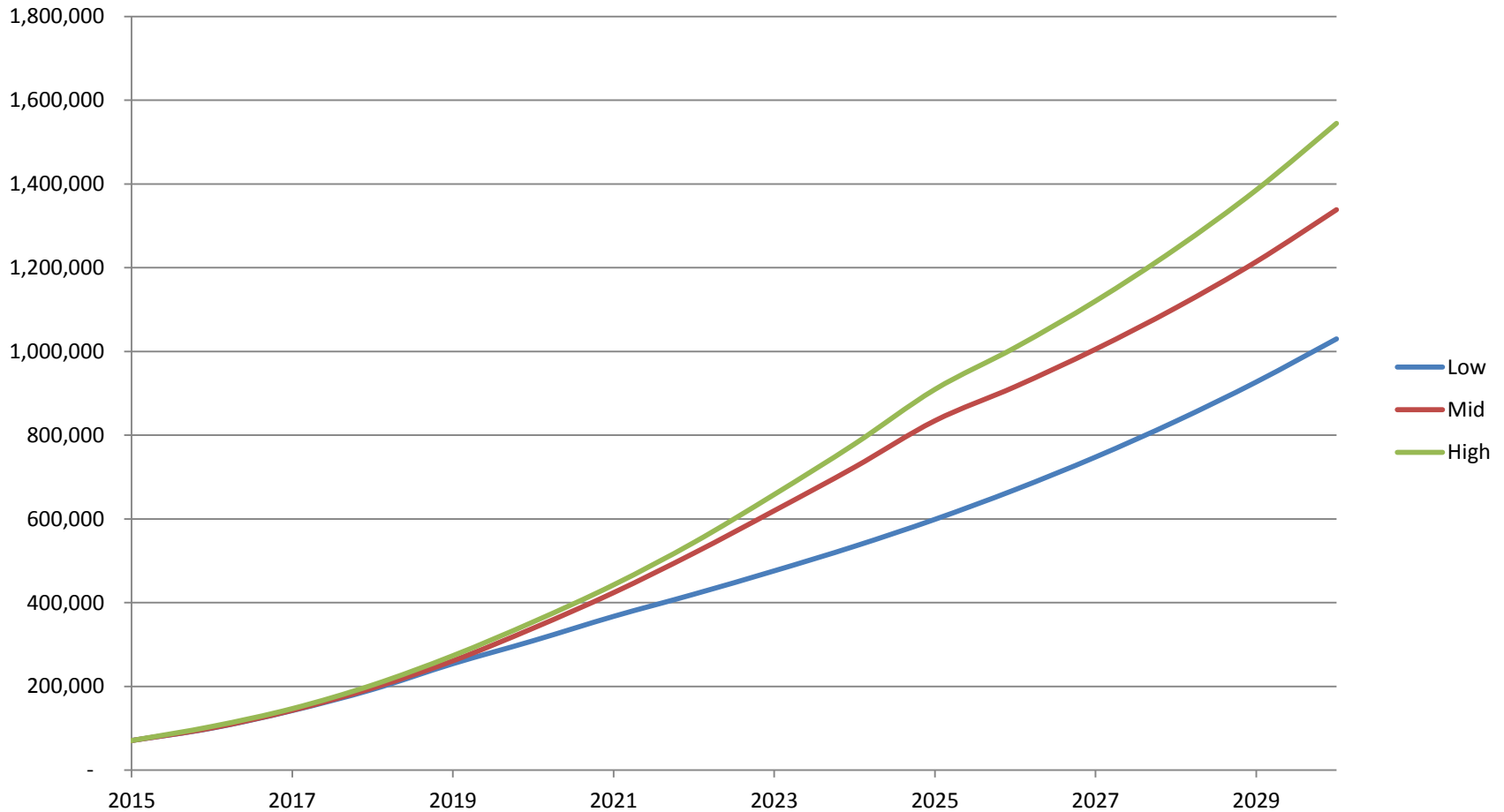
2016 BEV & PEV Shares, by Utility



Source: California Energy Commission Analysis of DMV Data

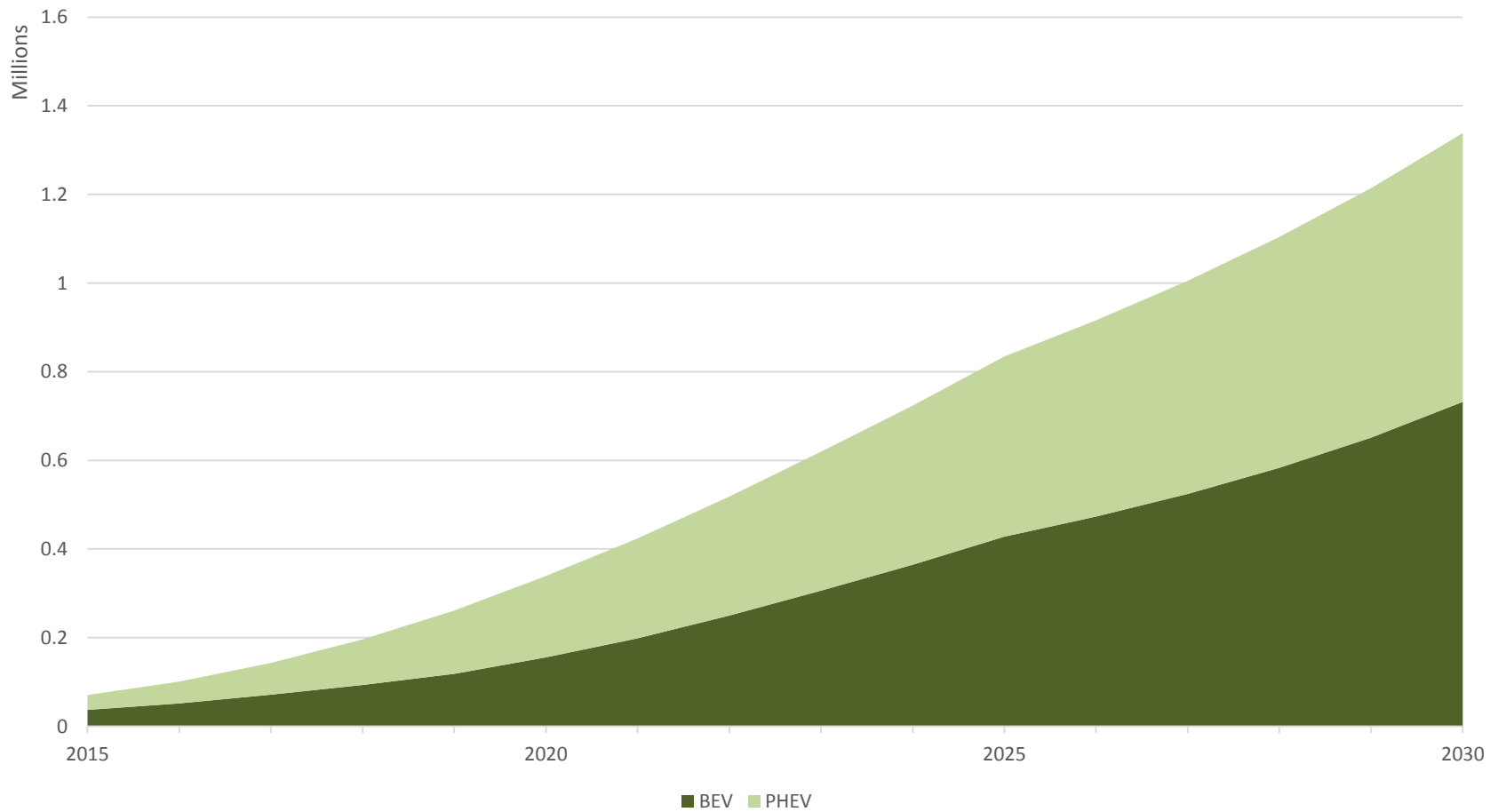


PG&E, Revised PEV Forecast



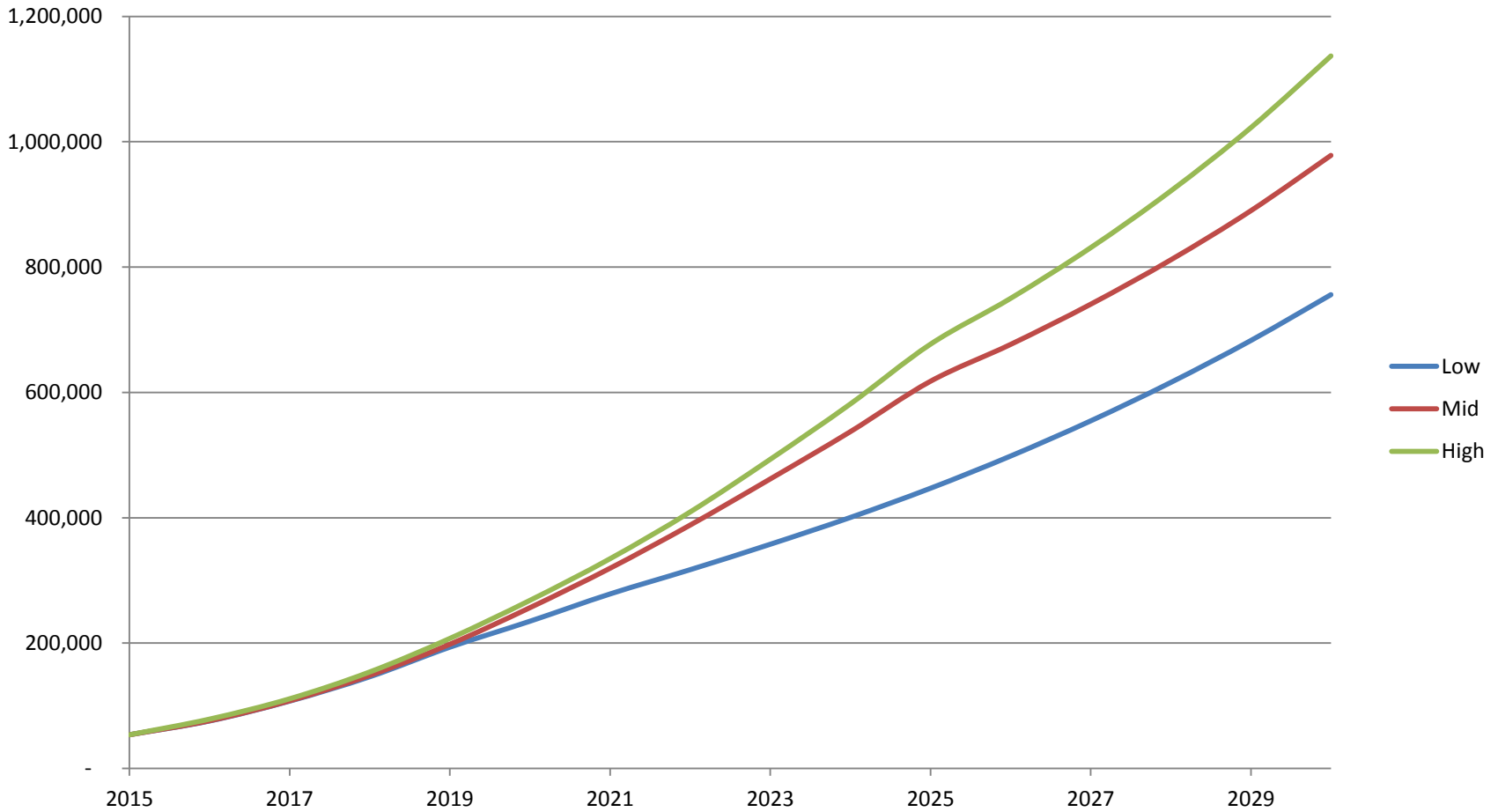


PG&E, Revised PEV Forecast by Technology, Mid Case



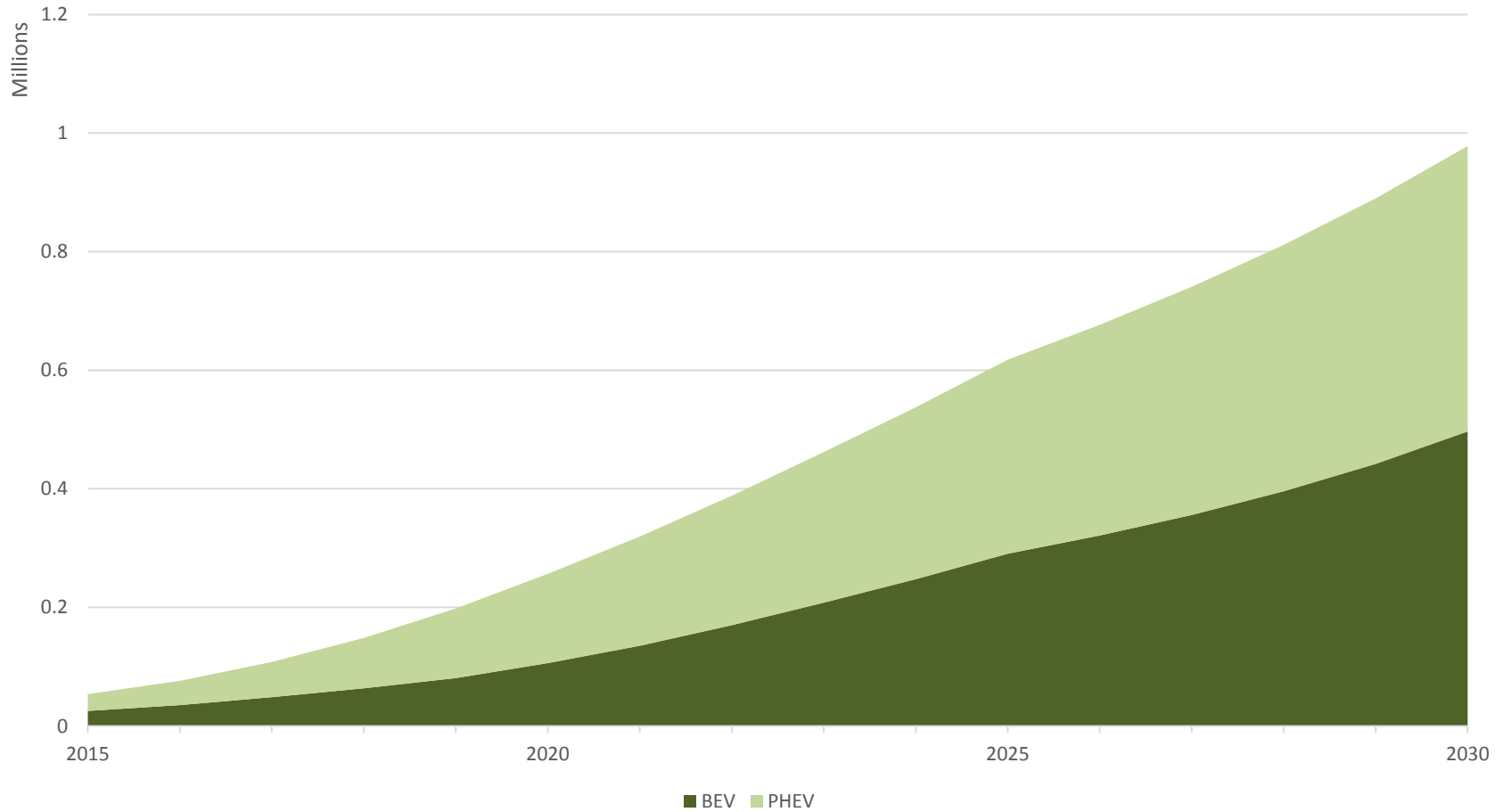


SCE, Revised PEV Forecast



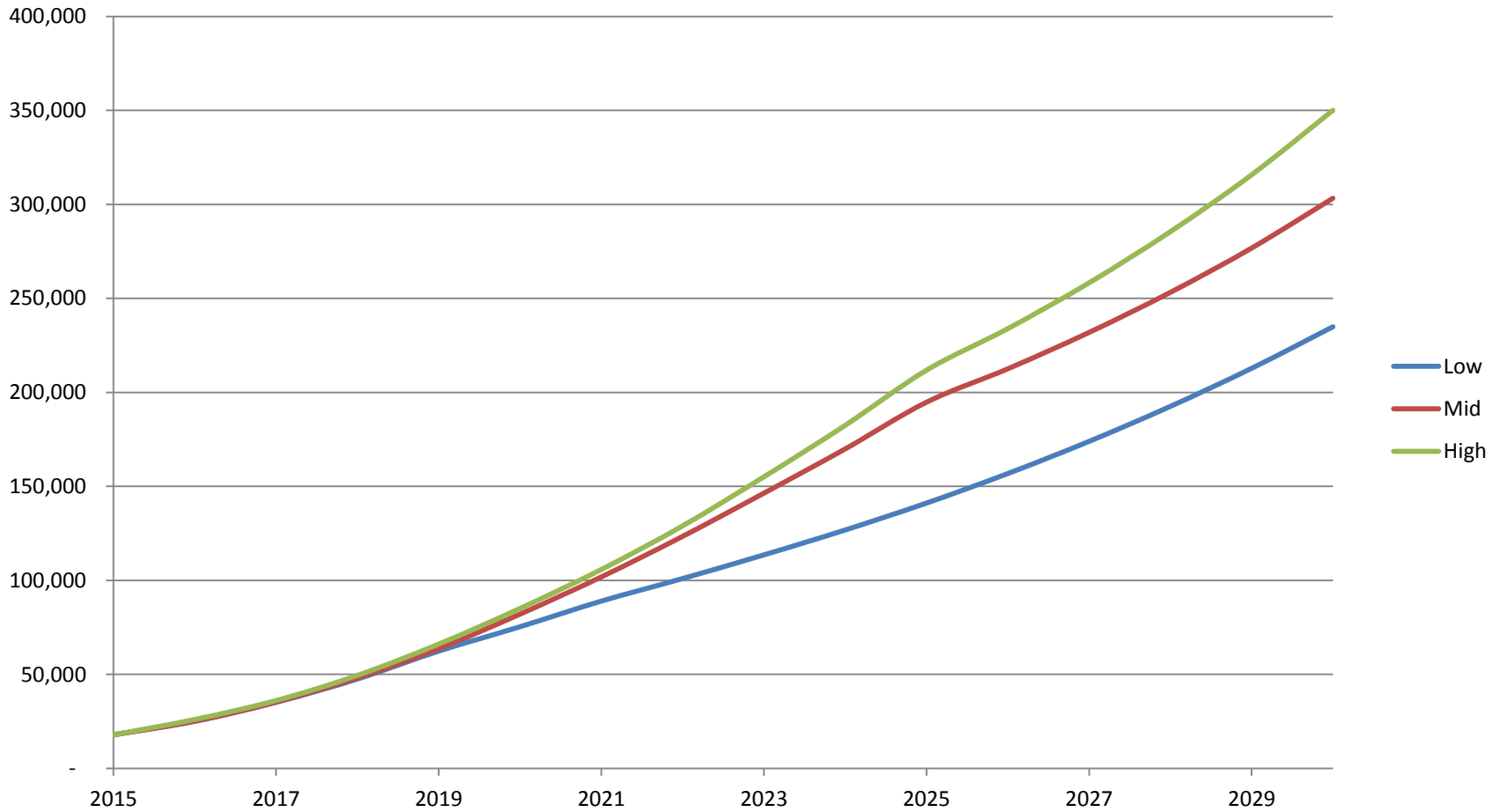


SCE, Revised PEV Forecast by Technology, Mid Case



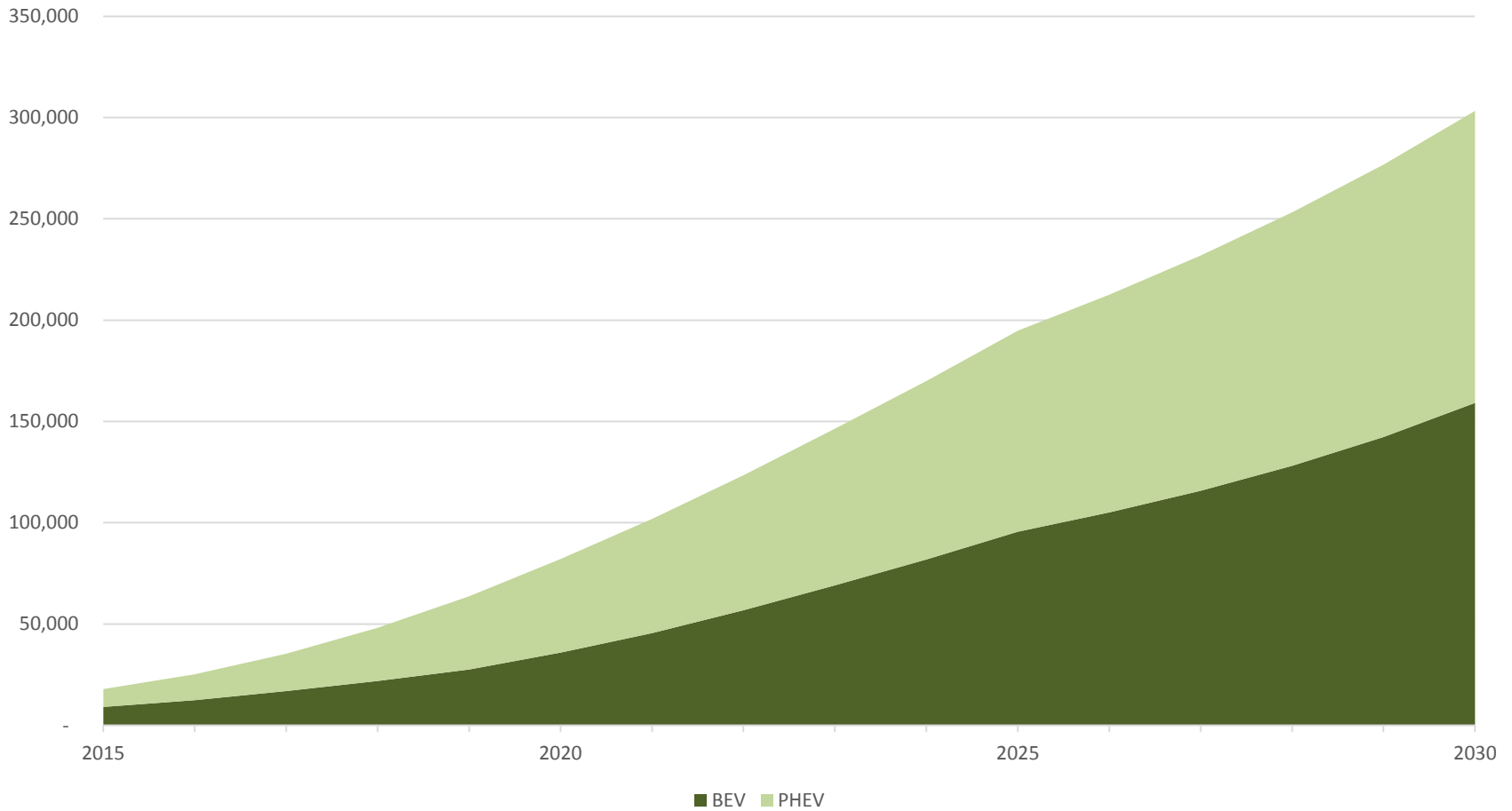


SDG&E, Revised PEV Forecast



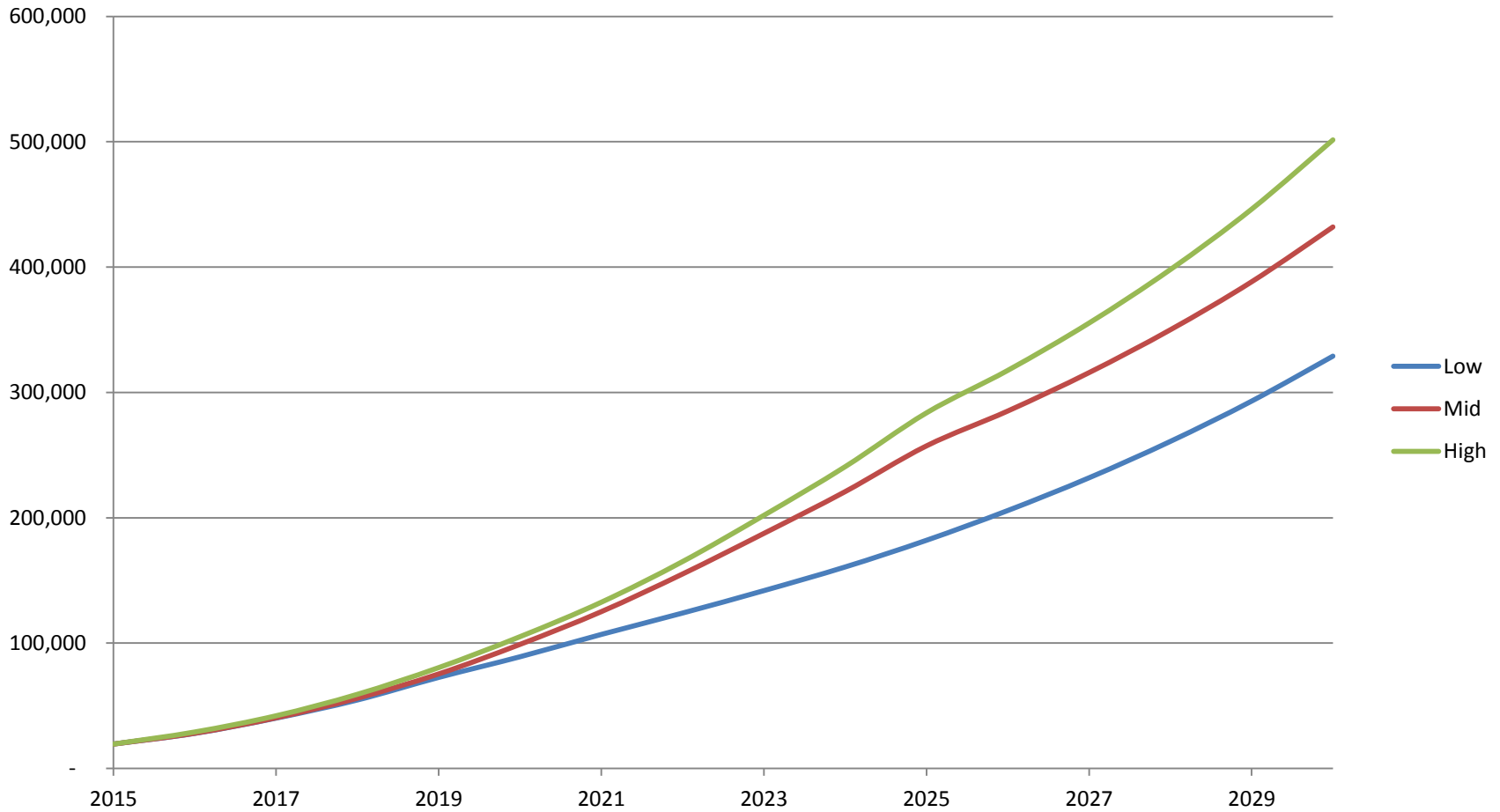


SDG&E, Revised PEV Forecast by Technology, Mid Case



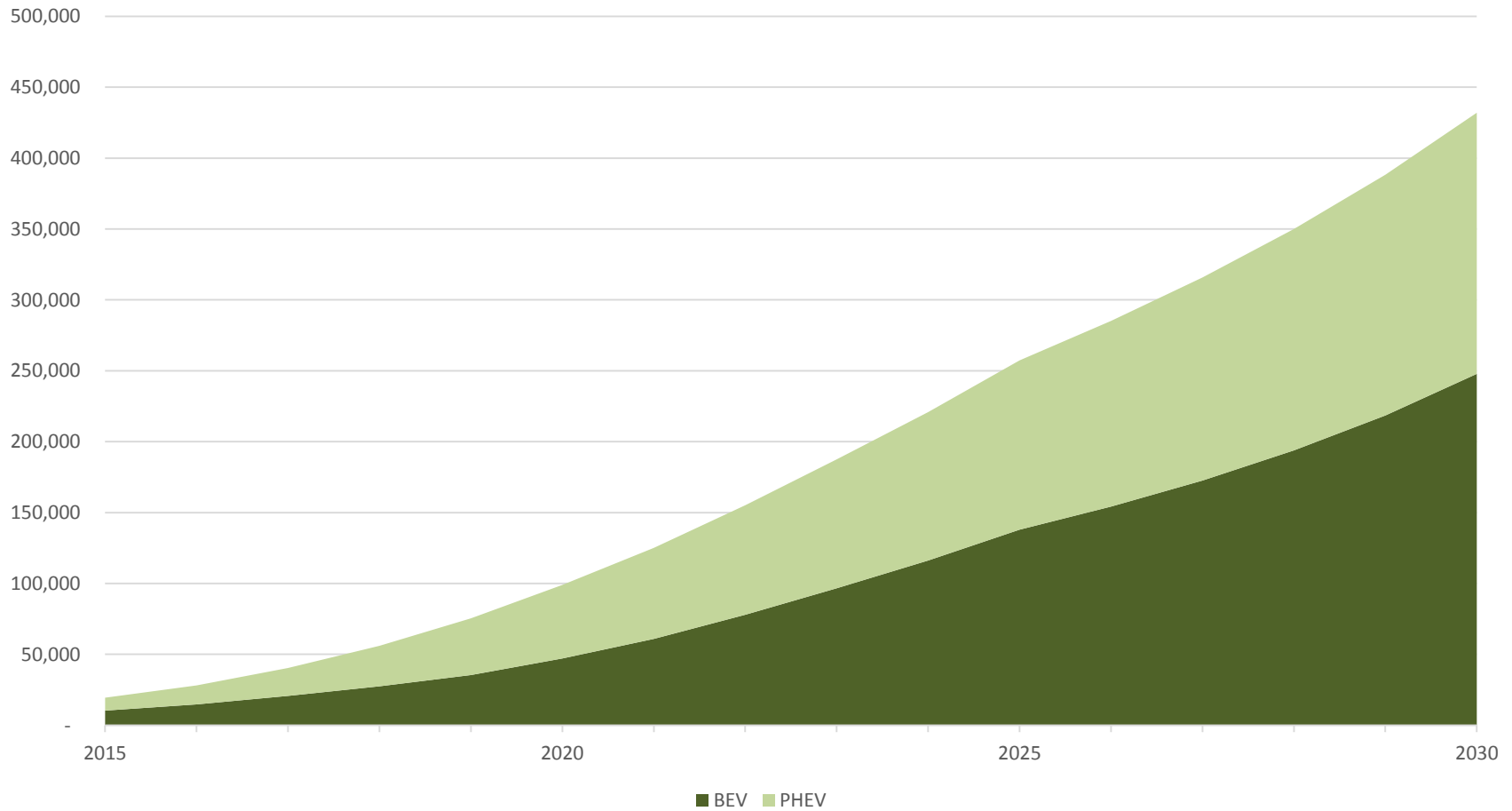


LADWP, Revised PEV Forecast



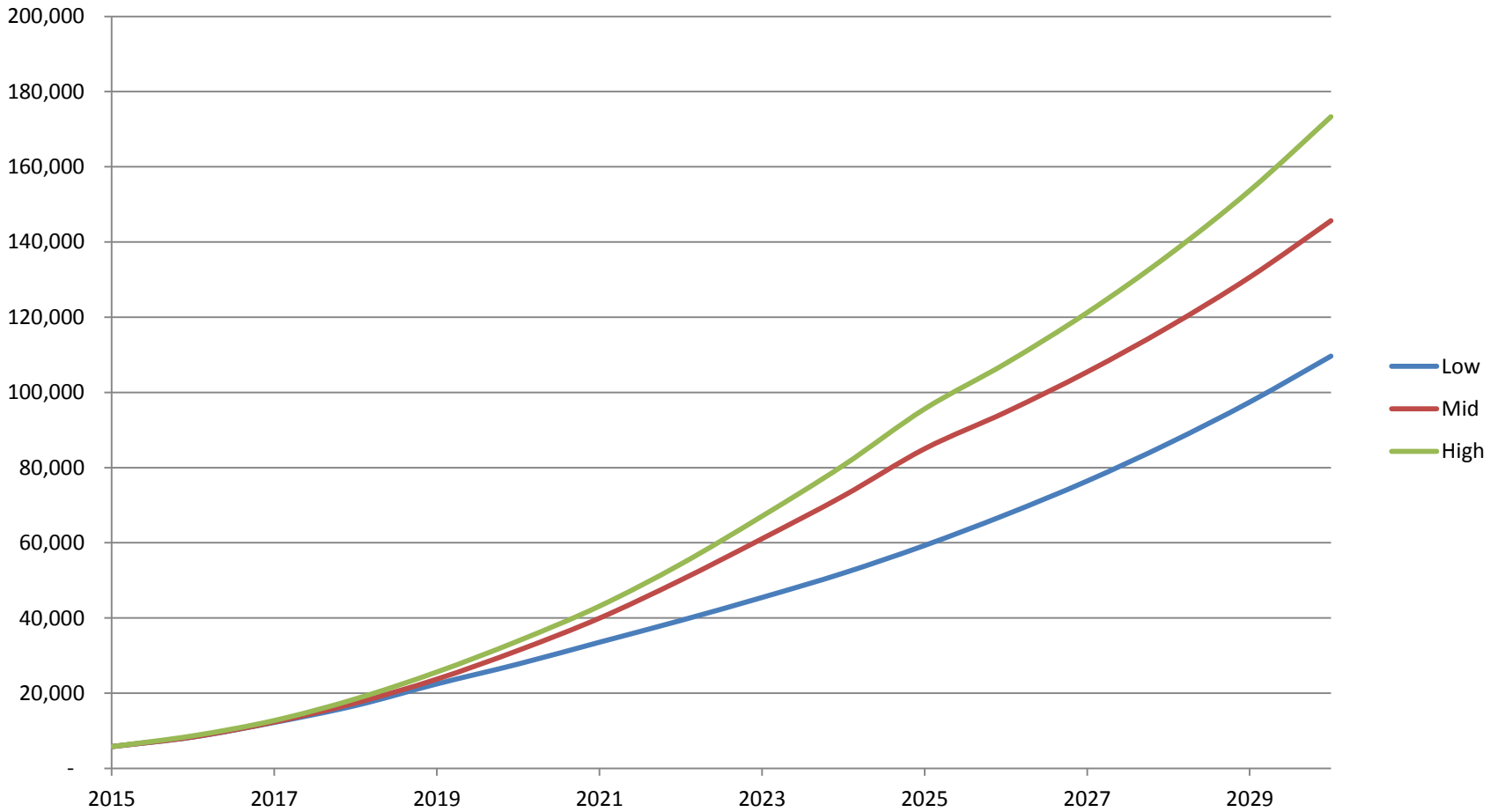


LADWP, Revised PEV Forecast by Technology, Mid Case



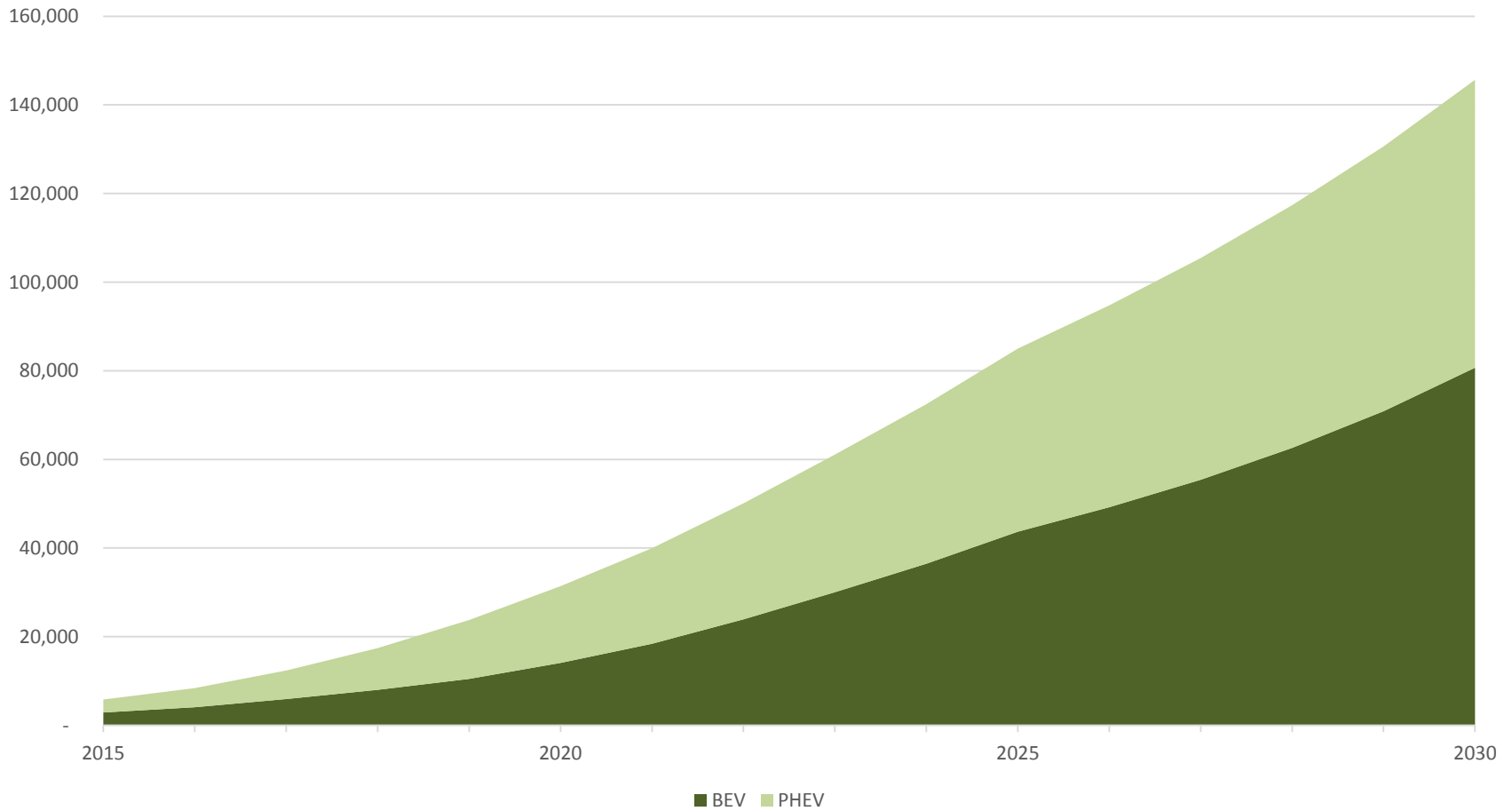


SMUD, Revised PEV Forecast





SMUD, Revised PEV Forecast by Technology, Mid Case

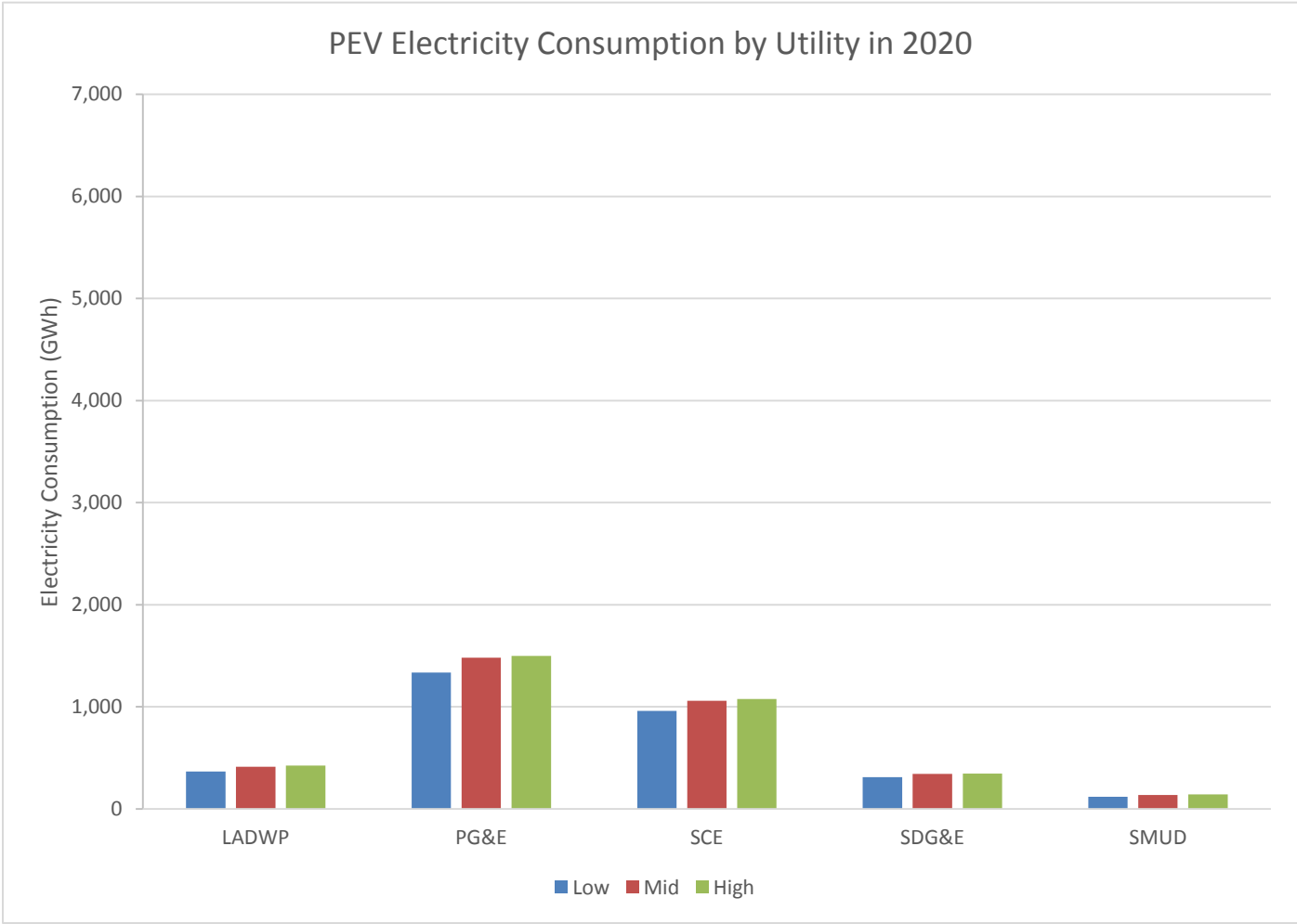


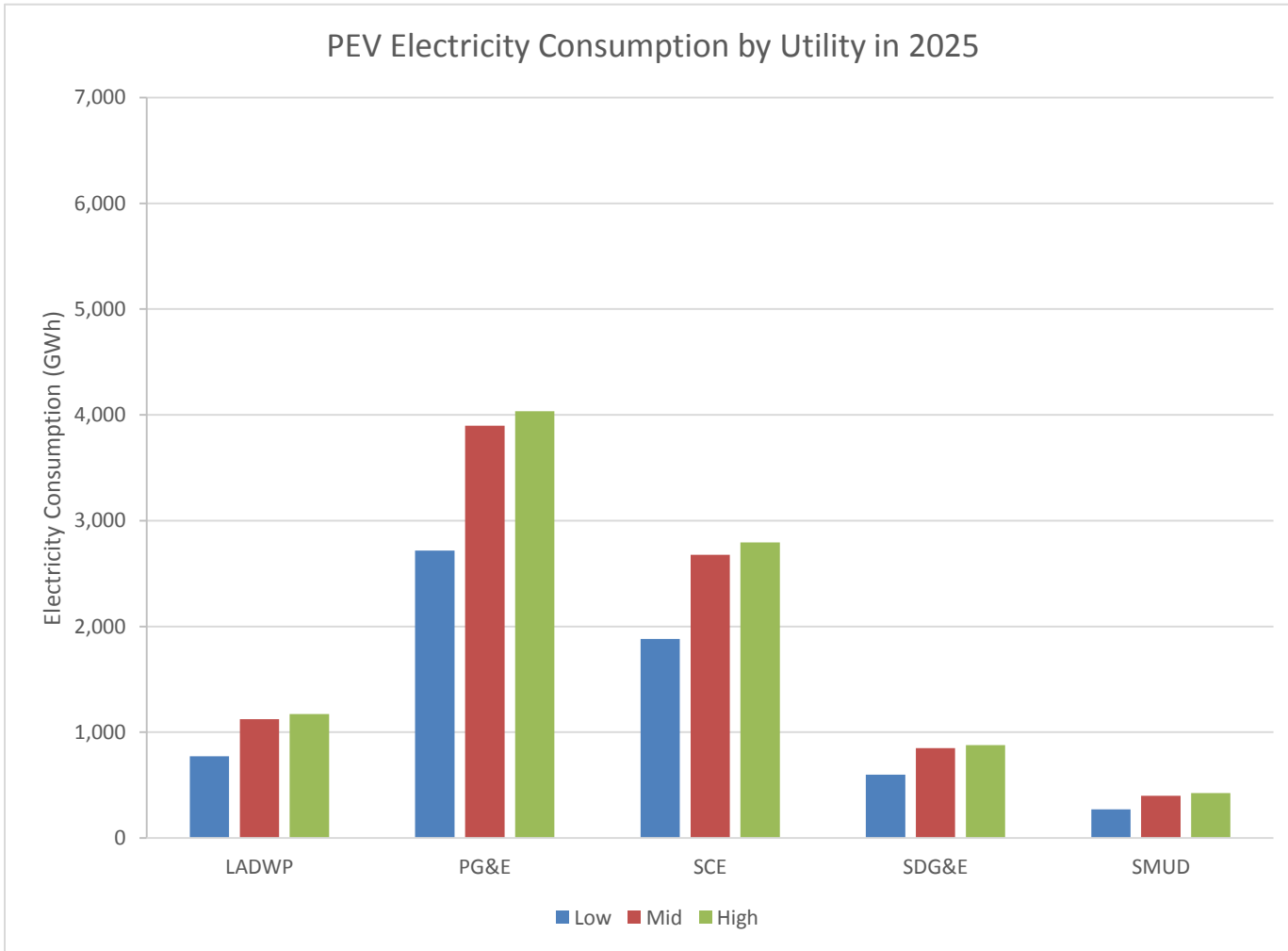


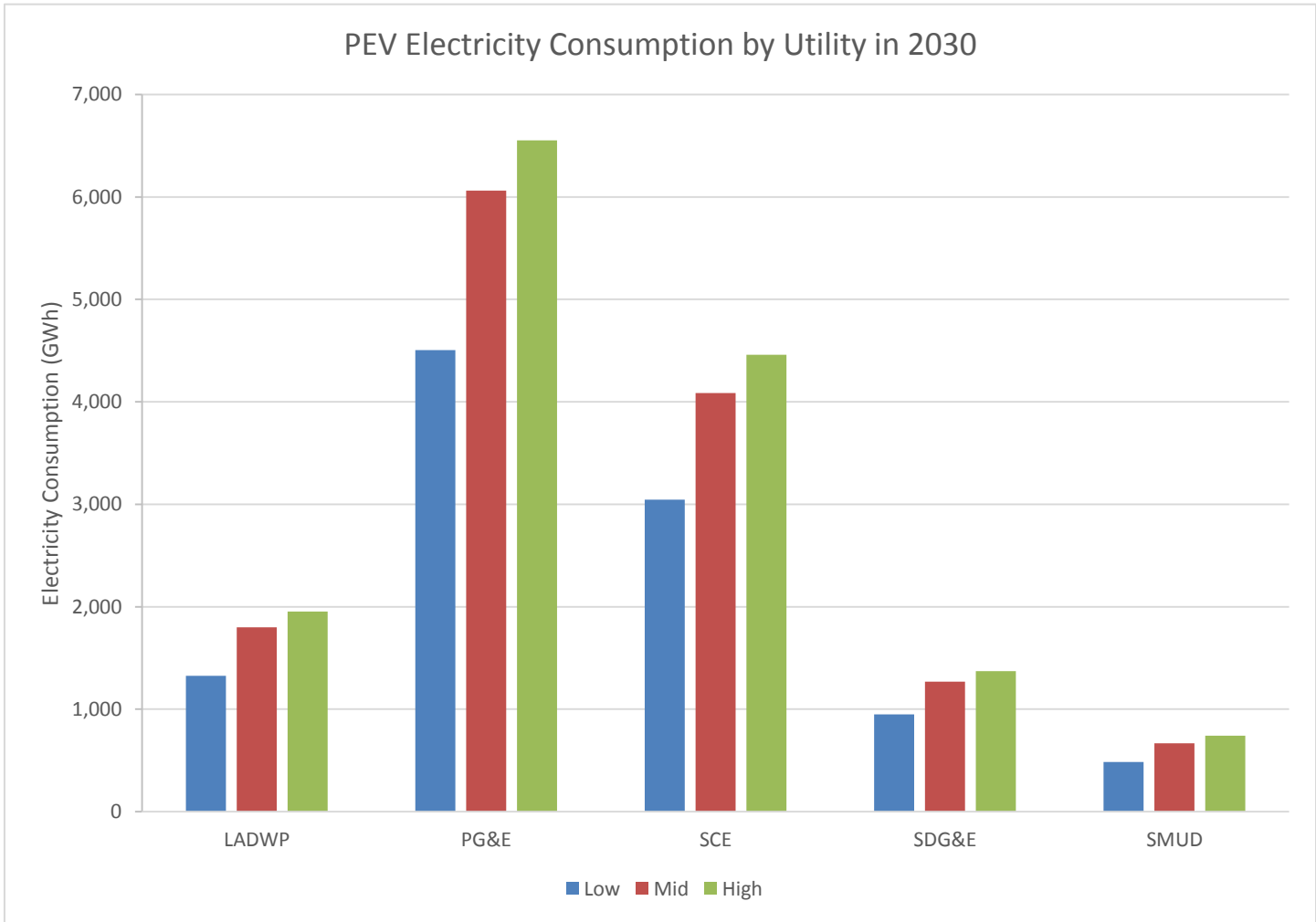
What About Consumption?



PEV Electricity Consumption by Utility in 2020





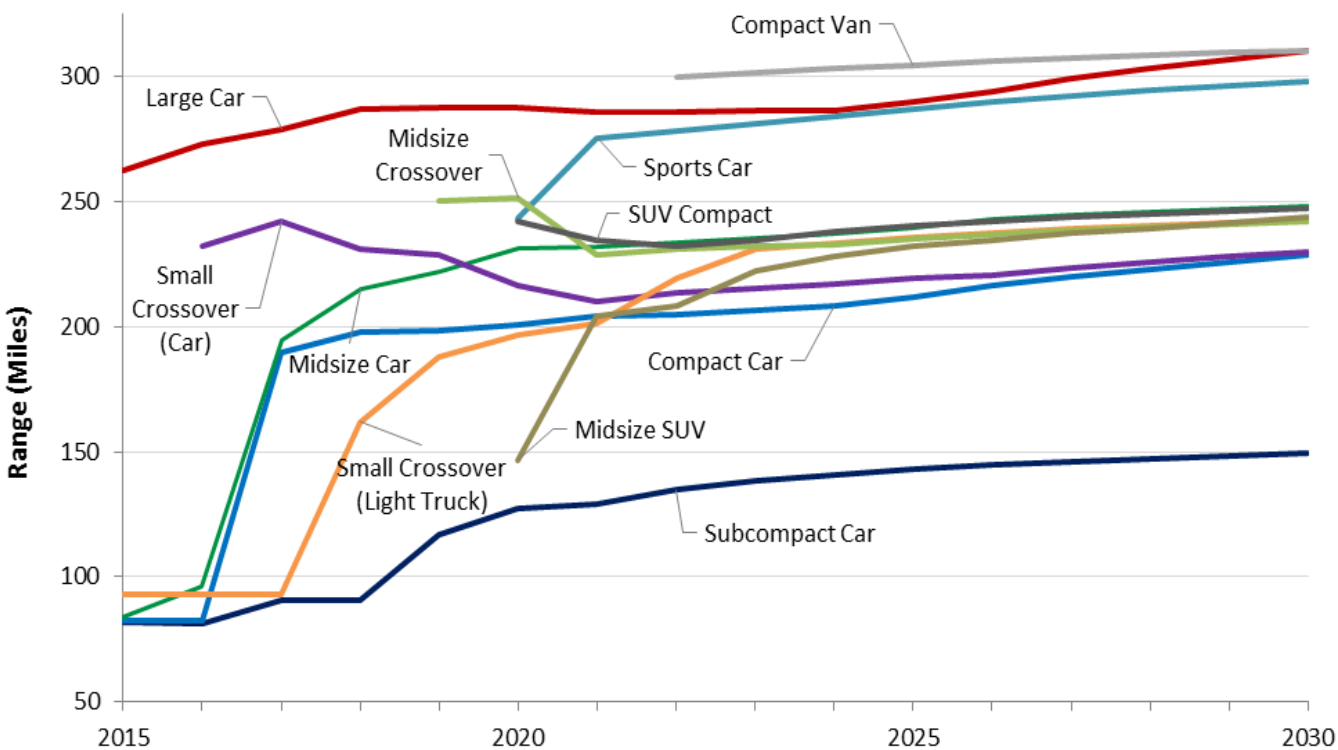




Vehicle Attributes



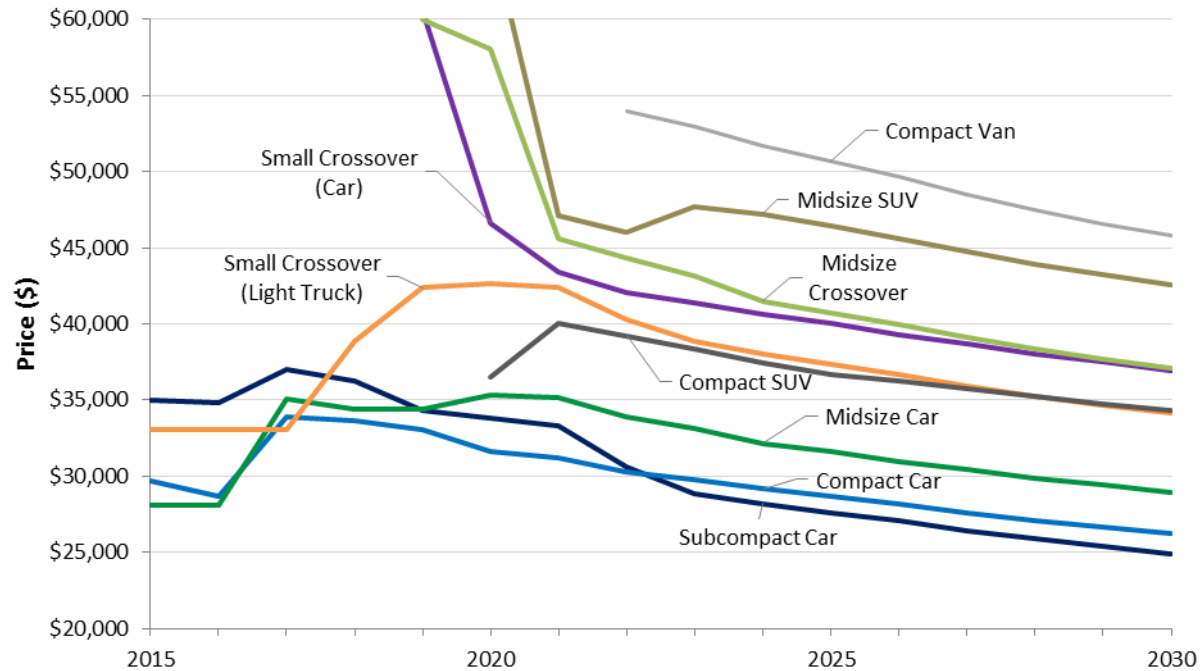
Projected Average BEV Range by Light-Duty Vehicle Class, Mid-Case



Source: California Energy Commission



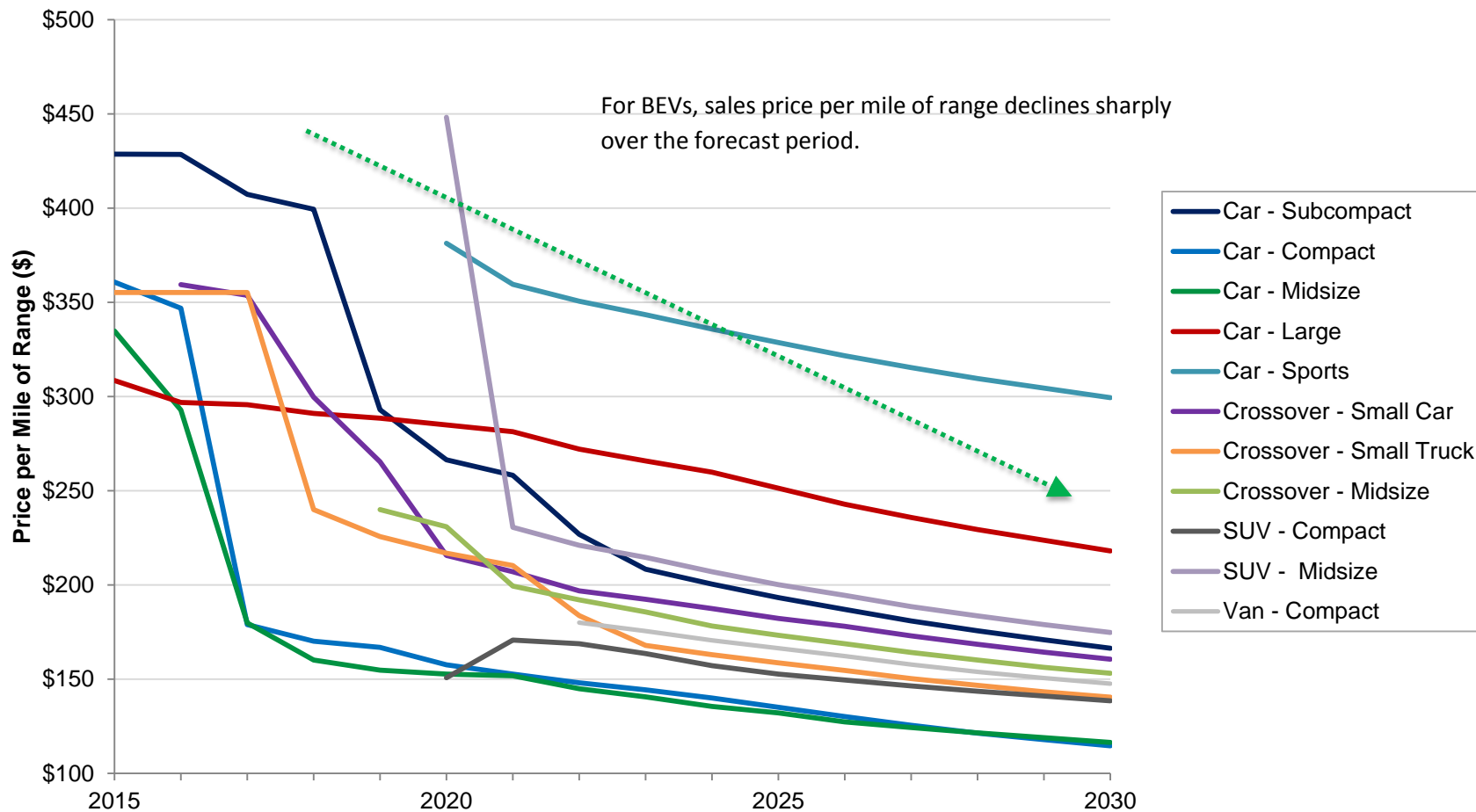
Forecast of Average BEV Price by Light-Duty Vehicle Class



Source: California Energy Commission



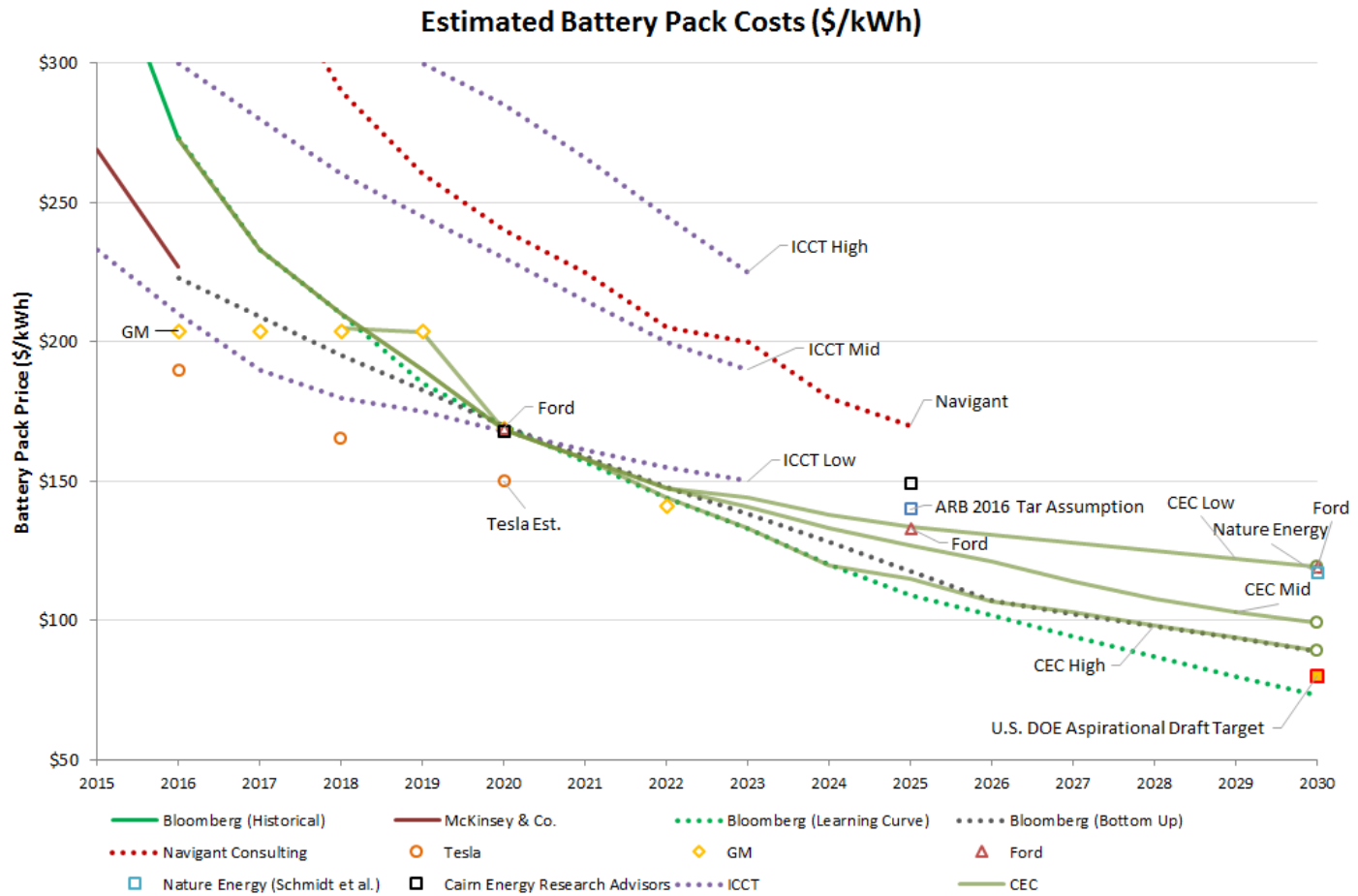
BEV Sales Price per Mile of Range by Vehicle Class, Mid Case



Source: California Energy Commission



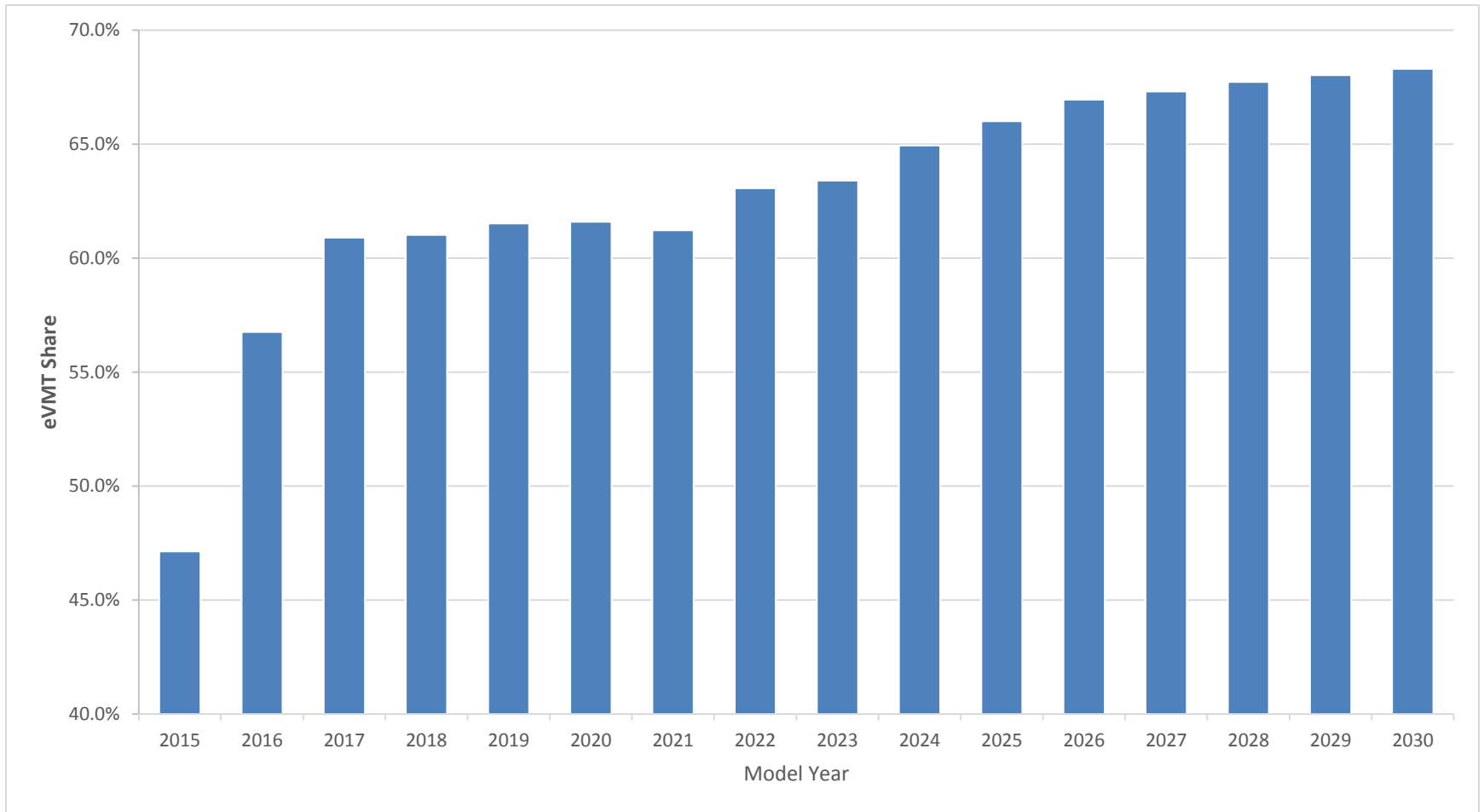
Comparison of Battery Pack Cost Trends



Source: California Energy Commission



PHEV's eVMT Share of Annual VMT



Source: California Energy Commission