

## Electrification Rate Assumptions

Domain	Sector	Electrification Case		
		AEO2022	Mid Range	High Range
California Certification Region (ZEV Mandate States)	Light Duty	AEO projections assigned to CA+177 States based on 2019 MY sales; CA+177 state share of national EVs increased linearly to 85% by MY2030 and held at 85% thereafter.	Modification of the High Range case assuming that 100% electrification will not be met until MY2050.	California ACC2 regulation plus linear growth to achieve 100% electric by MY2035; passenger car electrification occurs more quickly than LDT – PC electrification is about twice the rate of LDT until saturated. <sup>1</sup>
	Heavy Duty	AEO had negligible electric applications forecasted.	Modification of the High Range case assuming that 100% electrification will be met by MY2050	California ACT plus linear growth to achieve 100% electric by MY2040.
Balance of United States (Federal Certification Region)	Light Duty	AEO national projections less vehicles assigned to CA+177 states.	Biden Executive Order of 50% of national total sales electrified by MY2035 (5 years later than High Range); linear growth thereafter to reach 100% electrification by MY2060.	Biden Executive Order of 50% of national total sales electrified by MY2030; linear growth thereafter to reach 100% electrification by MY2050; passenger car electrification occurs more quickly than LDT.
	Heavy Duty	AEO had negligible electric applications forecasted.	One half the electrification growth rate of the High Range.	CALSTART MOU which generally aligned with ARB ZEV states schedule, and thereby ARB implementation assumed.

<sup>1</sup> Automobile electrification rate is about twice that of light-duty trucks as observed in historic AEO data; faster automobile electrification also agrees with qualitative summary of ARB's ACC2. In this assessment, the PC and LDT segments achieve 100% electrification at model years 2032 and 2035, respectively.

## Appendix A

Other assumptions:

- AEO2022 activity forecast extrapolated linearly from 2050 to 2060.
- Mid and High Range electric mandates include 20 percent set aside for plug-in hybrids.

Seventeen states modeled in the California certification region are listed below. Note that DC had adopted California standards at the time of this publication but was not included in the California certification region as the inventory impact analysis was already complete.

- Colorado
- Connecticut
- Delaware
- Maine
- Maryland
- Massachusetts
- Minnesota
- Nevada
- New Jersey
- New Mexico
- New York
- Oregon
- Pennsylvania
- Rhode Island
- Vermont
- Virginia
- Washington









