

DOCKETED

Docket Number:	22-IEPR-05
Project Title:	Emerging Topics
TN #:	247665
Document Title:	Presentation - Fuels Transition Study Context, Considerations, and Timeline
Description:	Presented by Quentin Gee
Filer:	Donnie Cox
Organization:	California Energy Commission
Submitter Role:	Public
Submission Date:	11/23/2022 9:42:16 AM
Docketed Date:	11/23/2022



Fuels Transition Study: Context, Considerations, and Timeline

Quentin Gee, PhD

November 29, 2022



2020: ZEV Market Share was Growing

California Light-Duty ZEV Market Share, 2011 to Q3 2022





Today: ZEV Market Share is Accelerating

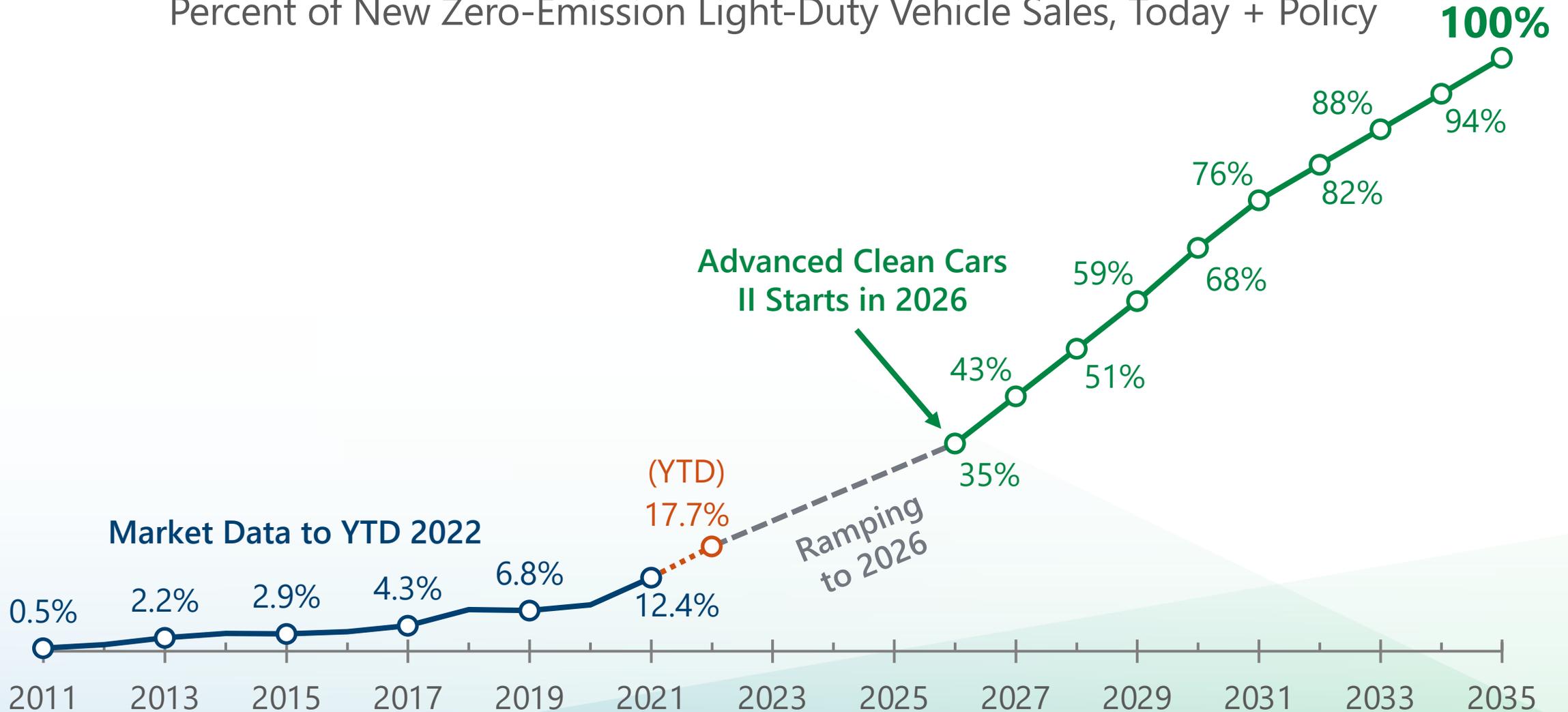
California Light-Duty ZEV Market Share, 2011 to Q3 2022





Market Data Suggests a Plausible Smooth Transition to CARB Policy Attainment

Percent of New Zero-Emission Light-Duty Vehicle Sales, Today + Policy





Current Climate Policy-Informed Scenarios and Plans

1. CEC 2021 Policy-Compliance Demand Scenario

- Includes early-stage regulatory proposals from 2021 only
 - Advanced Clean Cars II
 - Advanced Clean Fleets
- Higher vehicle miles traveled

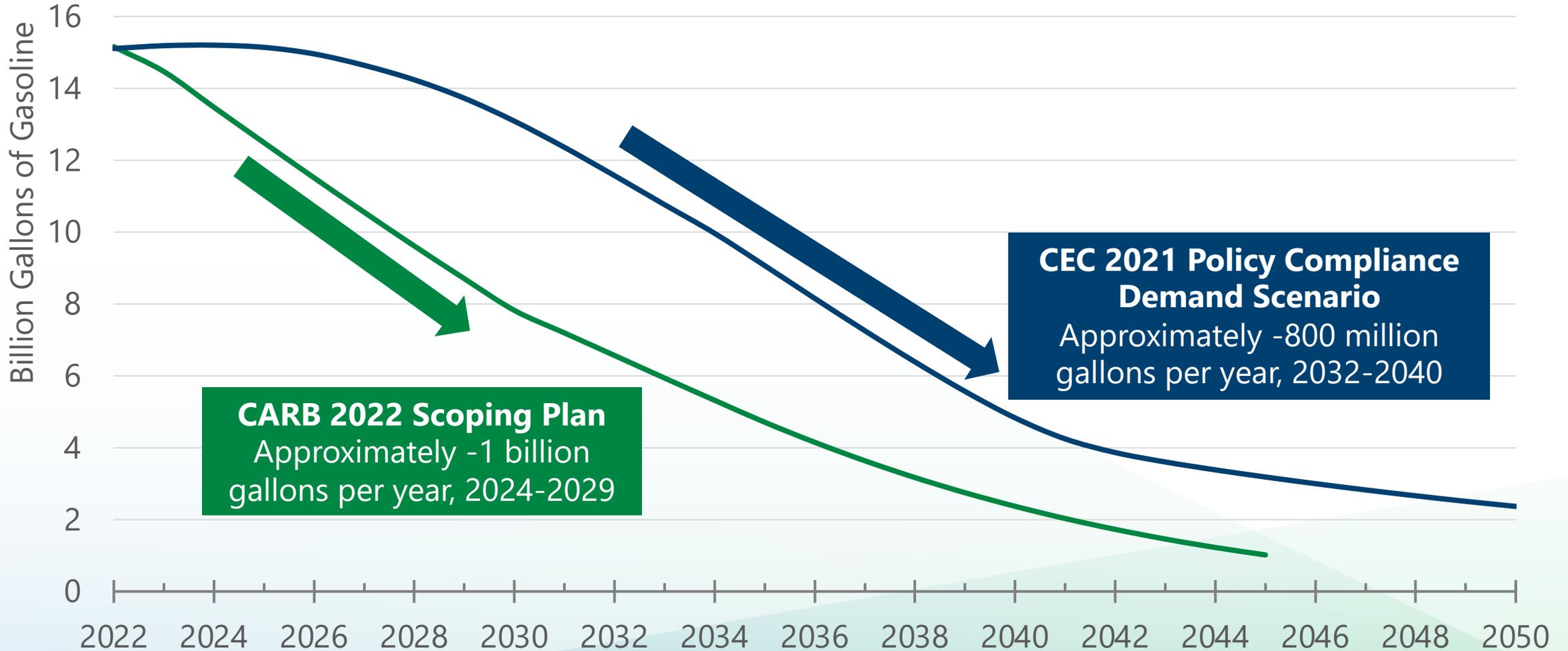
2. Final 2022 CARB Scoping Plan Modeling Data

- Includes more than specific regulatory frameworks
- Large reduction in vehicle miles traveled



Increased Electricity as a Fuel Results in Decreases in Gasoline Demand

Gasoline Demand for Various Scenarios (2022-2045)



CARB 2022 Scoping Plan
Approximately -1 billion gallons per year, 2024-2029

CEC 2021 Policy Compliance Demand Scenario
Approximately -800 million gallons per year, 2032-2040



Considerations for the Fuels Transition

Goal

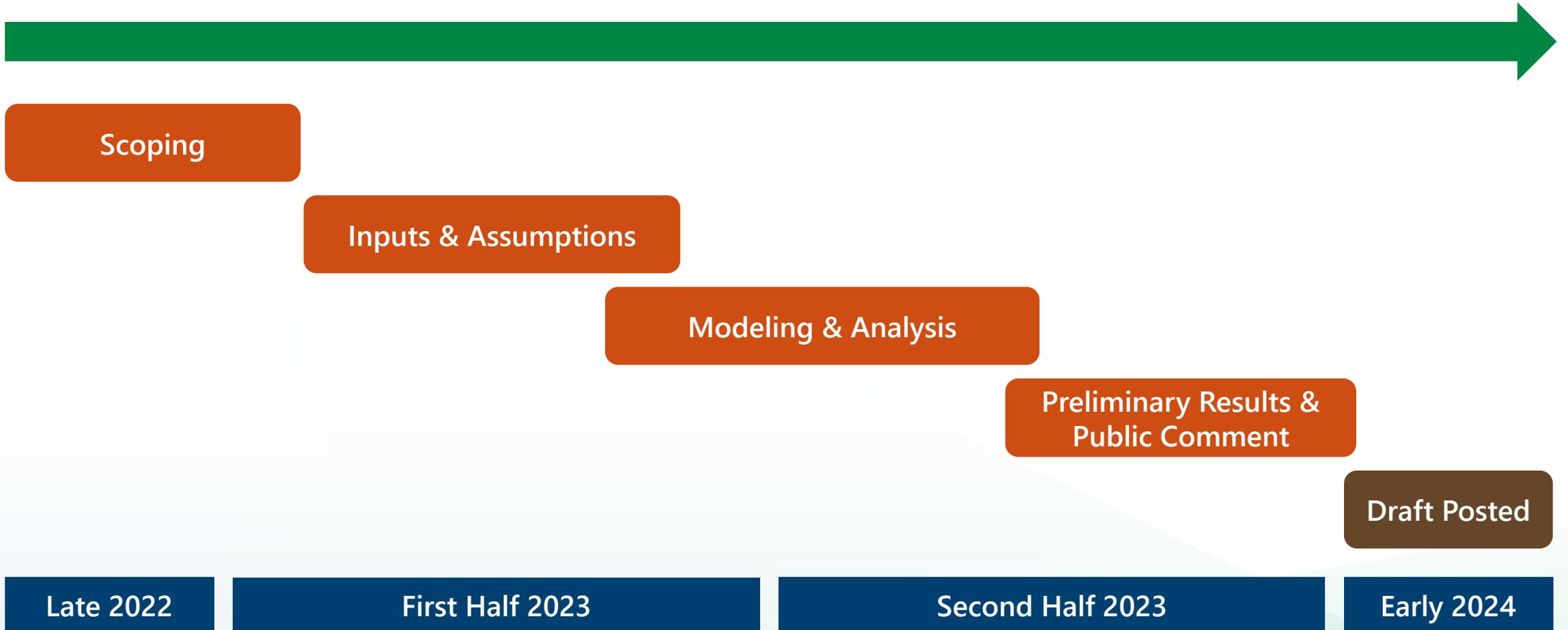
Reliable, safe, equitable, and affordable transition away from petroleum

Considerations

- Time horizons for consideration (1-3 years, 3-10 years, 10+ years)
- Equity
- Policies to address price volatility
- Policies to increase access to alternatives
- Reasonable access to refining, import, export, and blending information, along with pertinent planning information
 - Ensure confidentiality
- Price and fuel demand scenarios



Study Timeline





Thank You!

Quentin Gee
Acting Manager, Advanced Electrification Analysis Branch
Energy Assessments Division
quentin.gee@energy.ca.gov