

Critical Need for Actions to Accelerate the Transition to a Zero Emission Future

July 25, 2019

Challenges: Air quality and climate change impacts from transportation



CARB

California's Key Targets

NOx, South Coast, All Sources





*Adopted through 2017



What Will It Take?



California Light-Duty ZEV Market Growing 2018:



Light-Duty ZEV Model Availability Expanding



Medium- and Heavy-Duty ZEV Model Availability Expanding



6 Million Light-Duty ZEVs Globally



Source: ICCT and EV-Volumes



ARB

Supporting **Programs** Help provide fueling infrastructure, education, and best practices

check ou savings to

Light-Duty Vehicle Regulations that Impact ZEVs

- Advanced Clean Cars II (2021 board item)
 - Requirements on automakers for post 2025 MY
 - ZEV Regulation
 - GHG Regulation
 - Criteria Regulation
- Clean Miles Standard (2020 board item)
 - Requirements on ride hailing passenger vehicle services
 - Minimum required electric VMT to be included



Heavy-Duty On-Road and Off-Road Regulations that Impact ZEVs



ZEV Policy Areas

1) ZEV Targets that Lead to a Full Transition to ZEVs

2) Making ZEVs More Financially Feasible

- Increased incentive funding to provide purchase incentives with a focus on priority populations
- Pricing strategies (e.g., Feebate or road-usage program that incentivize ZEVs)

3) Ensuring Fuel Prices Support Transportation Electrification

Accelerate efforts to design electricity rates to support transportation
electrification



ZEV Policy Areas

4) Holistically Plan and Invest in ZEV Infrastructure

- Extend alternative fuel funding programs with a focus on zero emission infrastructure
- Prioritize infrastructure investments within or near priority populations, and for high-mileage passenger and delivery services

5) Strengthen Role of Local Governments to Incentivize ZEVs

 Enable local jurisdictions to implement pricing and other policies that encourage ZEVs



ZEV Policy Areas

6) Increasing Zero Emission Miles in Fleets

- Adopt zero emission mileage requirements in all high-mileage and new mobility fleets (e.g., delivery services, car sharing)
- Establish ZEV and/or eVMT targets for government fleets

7) Expand ZEV Outreach and Education

- Dedicate additional State funding for ZEV consumer and fleet outreach and education campaigns, and training for gov't and building officials
- 8) Support the ZEV Transition Through Workforce Development and Training



Role of Fleets in ZEV Expansion

- 1) Assess current and future fleet needs
- 2) Understand zero emission options, infrastructure, incentives, and policies
- 3) Collaborate with internal and external stakeholders
- 4) Plan fleet and infrastructure roll-out
- 5) Share your ZEV fleet experiences with others



Conclusions

- The magnitude and speed of change needed to achieve California's goals is unprecedented.
- The State has implemented many programs to promote ZEVs, but new programs and policies will be needed.
- Even under an aggressive scenario, need for significant VMT reductions and renewable fuels.

