

Public Workshop on Policy Recommendations to Improve Zero Emission Vehicle Programs



May 31st, 2019

Today's Agenda

- ❑ **SB 498 background**
- ❑ **Draft policy recommendations**
- ❑ **Discussion**

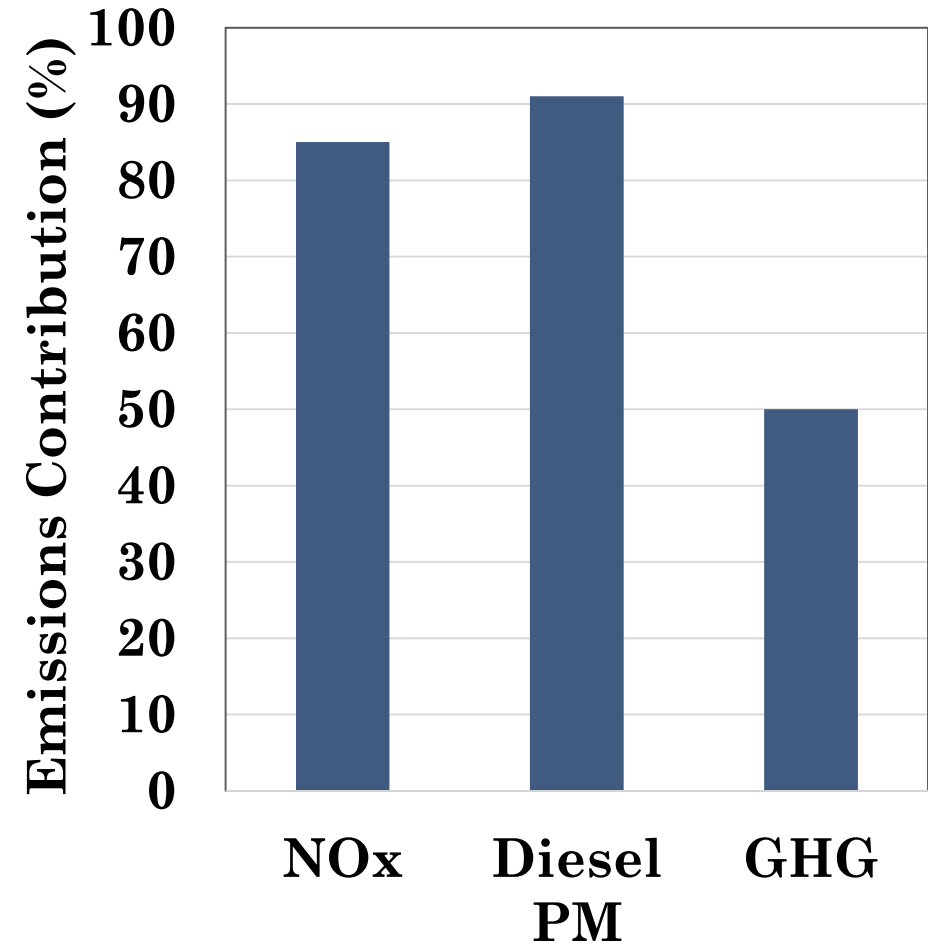
SB 498 Report Requirements

- ❑ Review CARB programs affecting the adoption of light-, medium-, and heavy-duty ZEVs
 - a) GHG/air quality goal and status in meeting its goals
 - b) Cost-benefit analysis
- ❑ Compare CARB's ZEV programs with other states' and countries' programs
- ❑ Make recommendations to Legislature to maximize effectiveness of programs and to encourage ZEV adoption on a general basis and in fleet use

ZEVs are Essential

- ❑ California's transportation sector is leading source of air pollution
- ❑ ZEVs needed to achieve State goals:
 - Public health protection
 - Air quality
 - Climate change

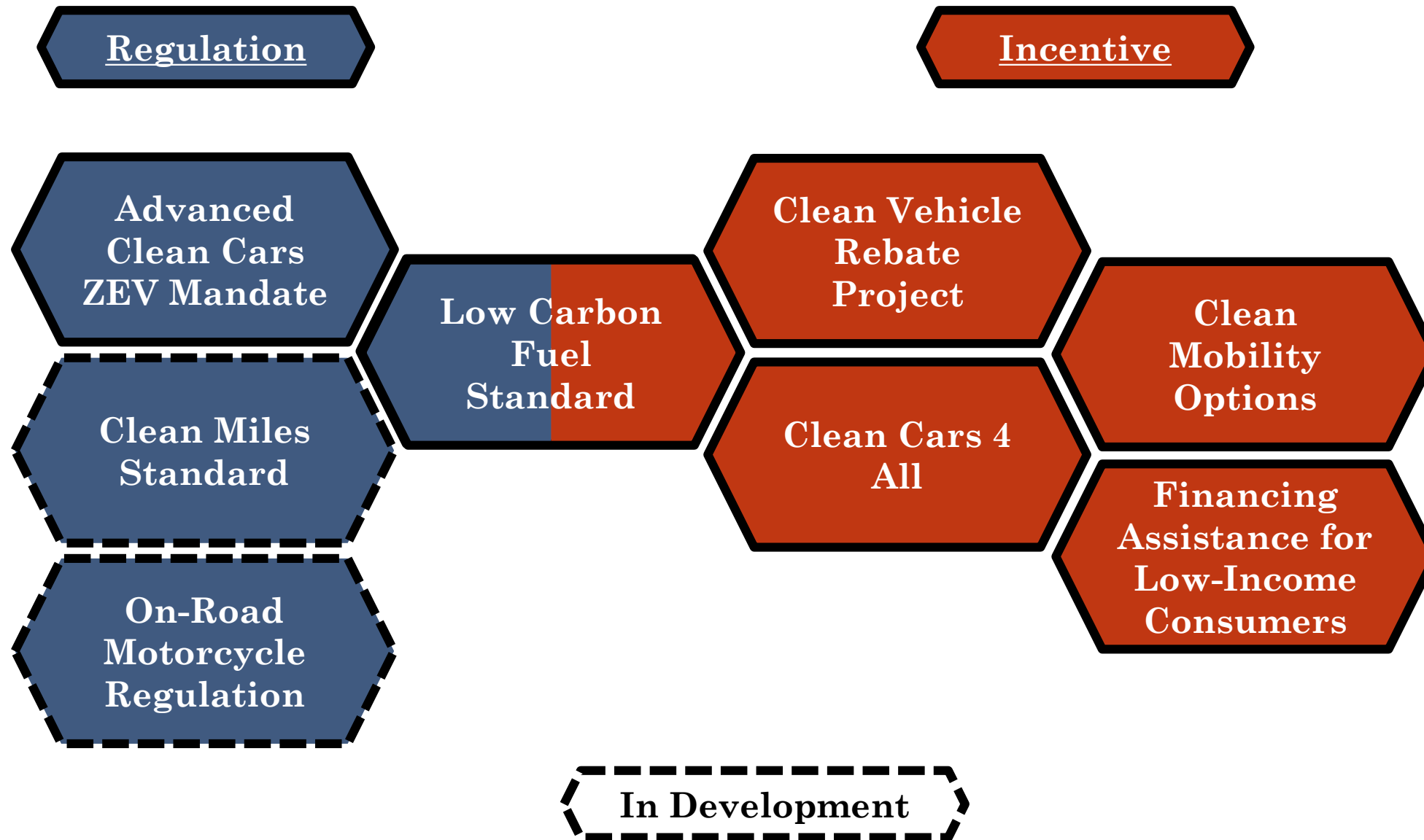
Total Emissions Contribution from Transportation Sector



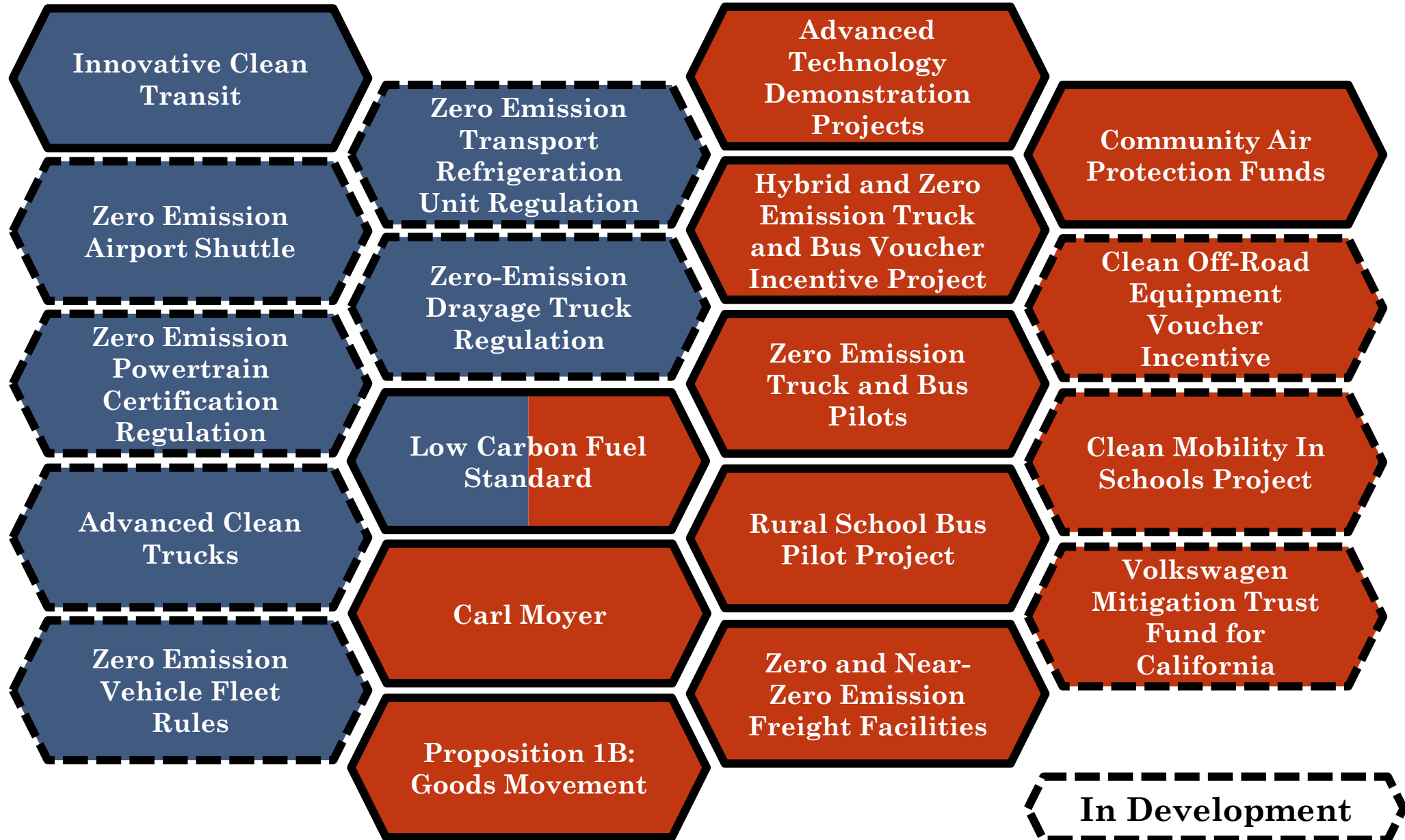
ZEV Programs

- ❑ **Regulatory Programs:** help ensure ZEVs are produced and that fleets use them
- ❑ **Incentive Programs:** help encourage consumers and fleets to purchase and test ZEVs
- ❑ **Supporting Programs:** help provide fuel and infrastructure, education, and best practices

Light-Duty ZEV Programs



Heavy-Duty ZEV Programs



Supporting ZEV Programs

Fuel & Infrastructure

Low Carbon
Fuel Standard

Green
Building
Standards

AB 8
Hydrogen
Fueling
Infrastructure

Education

Veloz

One-Stop-
Shop

Collaboration

California
Fuel Cell
Partnership

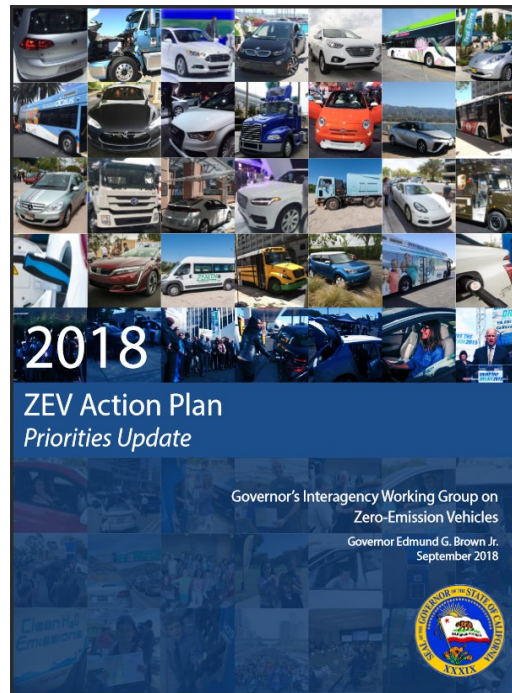
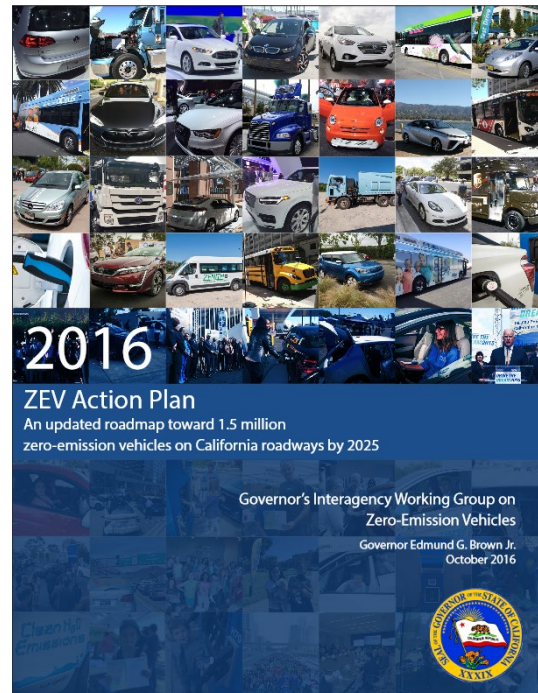
International
ZEV Alliance

Multi-State
ZEV Task
Force

Draft Policy
Recommendations

Direction

- ❑ **SB 498: make recommendations to Legislature to maximize effectiveness of programs and ZEV adoption on a general basis and in fleet use**
- ❑ **Build Upon ZEV Action Plan**



Process for Developing Policy Recommendations



**Caltrans
CWDB
CEC
CPUC
DGS
GO-Biz
GovOps**

1. Long-Term Signals

Provide long-term stable signals to attract private investments in the ZEV market

- a.** Provide predictable long-term funding for low-carbon transportation vehicle and infrastructure projects, including for priority populations
- b.** Provide long-term certainty to support private investments in markets such as the Low Carbon Fuel Standard
- c.** Set clear targets in ZEV regulation that demonstrate path towards full transition to ZEVs

2. Purchase Cost

Reduce the cost of ZEVs until they are comparable to conventional vehicles

- a. Continue and increase funding programs aimed at increasing priority populations' access to zero emission transportation and clean new mobility services
- b. Equalize the sales tax levied on ZEV vehicles and infrastructure, especially for buses and heavy-duty vehicles
- c. Develop an equitable, self-sustaining program that incentivizes ZEVs by imposing a fee on vehicles with high GHG emissions
- d. Reduce annual SB 1 electric vehicle fee for lower-income consumers

3. ZEV Fuel Pricing

Ensure electricity & hydrogen fuel prices support transportation electrification

- a.** Design electricity rates to support transportation electrification, including for priority populations
- b.** Identify strategies to reduce the price of renewable hydrogen production, including defining transportation electrification to be inclusive of hydrogen
- c.** Encourage synergies between transportation electrification, low-carbon distributed energy resources and load management strategies

4. ZEV Infrastructure

Holistically plan & invest in ZEV infrastructure through a multi-agency effort

- a. Encourage holistic planning and investments in battery electric and hydrogen infrastructure
- b. Incentivize the deployment of ZEV infrastructure within and near low-income and disadvantaged communities
- c. Encourage public investments in ZEV infrastructure designed for multiple purposes
- d. Require charging infrastructure at state facilities
- e. Support research and development in next-generation ZEV infrastructure technologies and operational strategies

5. Local Government

Authorize local governments to promote policies that favor ZEVs

- a.** Allow local jurisdictions to create zero emission zones designed with equity considerations
- b.** Allow local governments to implement equitable pricing mechanisms that favor VMT reductions, high-occupancy, ZEVs, and mobility needs for priority populations

6. Zero Emission Miles

Increase proportion of zero emission miles while reducing miles overall

- a.** Incentivize or require a minimum percentage of zero emission miles in new mobility services
- b.** Require a minimum fraction of ZEVs in local government fleets
- c.** Set zero emission-VMT and VMT targets for the State's fleet
- d.** Incentivize State ZEV leases and rentals

7. Outreach and Education

Support ZEV implementation through outreach & education

- a.** Identify dedicated funding for ZEV consumer and fleet outreach and education campaigns, including for priority populations
- b.** Continue to support state-of-the-art ZEV regional readiness planning and implementation
- c.** Fund training for local government building, planning, and inspection officials as well as builders

8. Workforce Development

Support the ZEV transition through workforce development & training

- a.** Build industry partnerships between educational institutions and employers to identify occupation and skill gaps
- b.** Secure the long-term transition through strategic workforce development and training
- c.** Analyze the job impacts from public investments in ZEV vehicles and infrastructure and identify strategies to improve the quality of these jobs

9. Program Flexibility

Facilitate flexibility for administering agencies to adopt simple ZEV programs for consumers

- a. Keep programs simple and streamlined for consumers and fleets to understand and access
- b. Provide administering agencies with discretion and flexibility to develop and implement programs that are aligned with State goals
- c. Extend funding expenditure deadlines

Questions

- ❑ From your experience and perspective what are the major barriers limiting privately owned and fleet uptake of light-, medium-, and heavy-duty ZEVs?
- ❑ What recommendations do you have for improving the pace of ZEV market adoption?
- ❑ Of the recommendations discussed today, which rise to the top as highest priorities?

Next Steps

- ❑ Please provide comments on policy recommendations by June 15th
 - ❑ Release draft report in late June
 - ❑ Board hearing in July
 - ❑ Submit report to Legislature in September
- Send Comments to: Melanie.Zauscher@arb.ca.gov**

Discussion

Thank You

<https://ww2.arb.ca.gov/our-work/programs/zero-emission-transportation>