

# Recommendations to Increase the Use of Zero-Emission Vehicles Per Senate Bill 498



January 23, 2020



# SB 498 Report Requirements

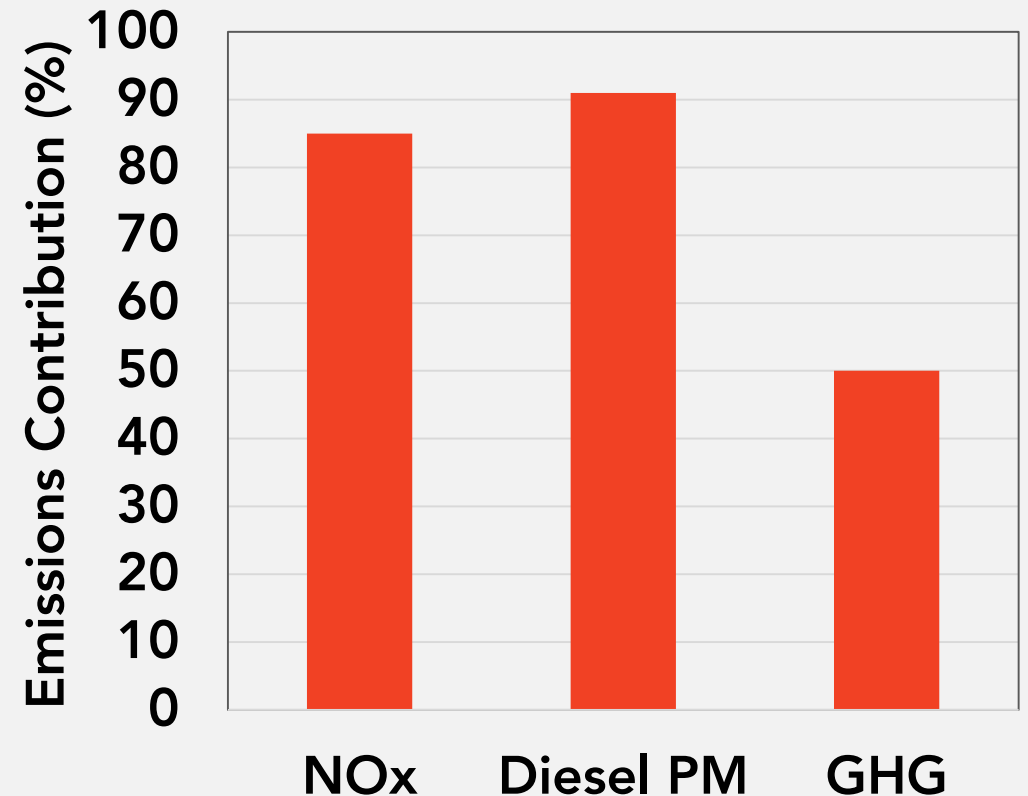
- ☐ Review CARB programs affecting the adoption of ZEVs
- ☐ Compare CARB's ZEV programs with other states' and countries' programs
- ☐ Make policy recommendations to accelerate the ZEV market
- ☐ Identify actions fleets can take to increase ZEVs within their operations



# **ZEVs Are Essential**

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

**Statewide Total Emissions  
Contribution from Mobile  
Sources**



Source: NOx and Diesel PM from the 2016 Mobile Source Strategy and GHG from the 2019 GHG Emission Inventory: 2000-2017.

# ZEV Programs



## **Regulations**

ZEV Regulation  
Advanced Clean  
Trucks  
Innovative Clean  
Transit



## **Incentives**

CVRP  
Clean Cars 4 All  
HVIP  
Clean Mobility  
Options

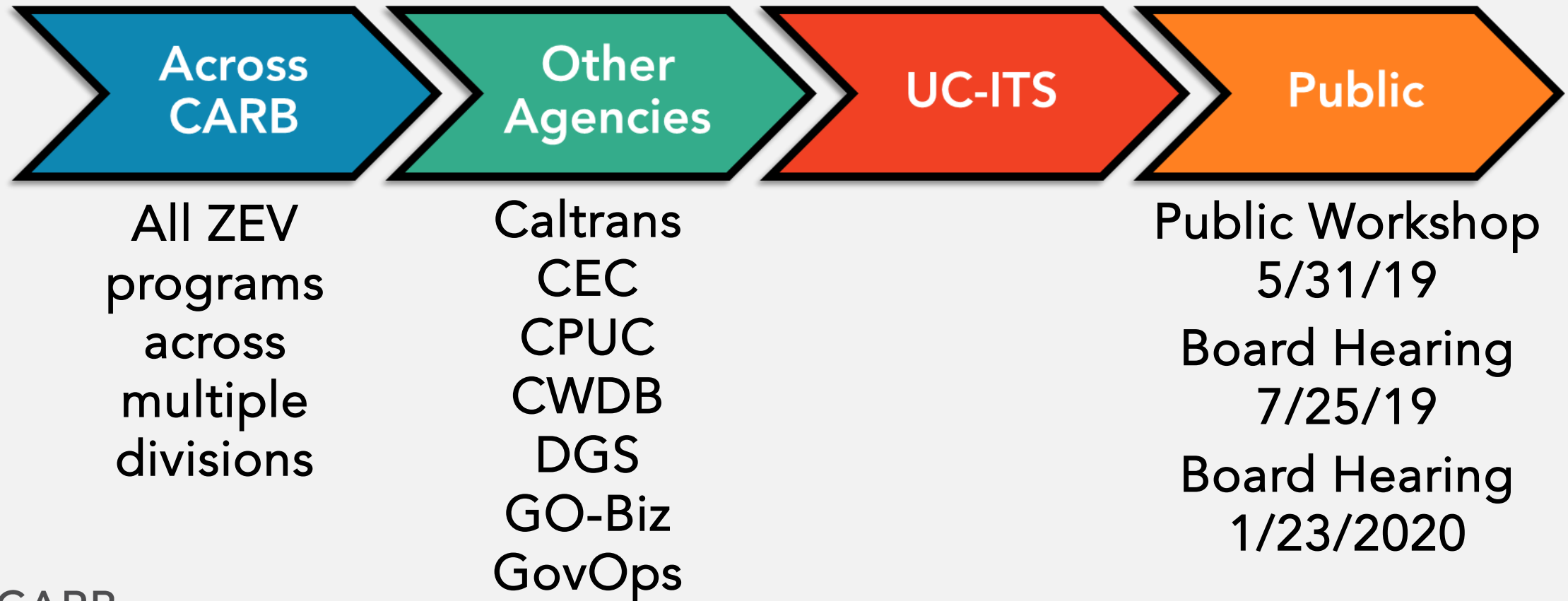


## **Supporting Programs**

CalGreen Code  
One-Stop-Shop  
AB 8 Hydrogen  
Fueling Infrastructure

# Developing Policy Recommendations

- ❑ Build Upon the Governor's ZEV Action Plan and EO N-19-19
- ❑ Stakeholder engagement:





# Policy Recommendations

To accelerate the ZEV market through:

1. Incentives and pricing strategies
2. Lower fuel costs
3. ZEV refueling infrastructure
4. Local policies
5. Fleet adoption
6. Outreach and education
7. Workforce development
8. Program flexibility



Photo Credit: Volvo Trucks

# 1. Incentives and Pricing Strategies

- a. Provide predictable and expanded funding for ZEV incentive programs.
- b. Provide increased incentive funding to ensure priority populations can access zero-emission transportation.
- c. Establish Statewide pricing strategies and zero-emission truck lanes along freight corridors.



## 2. Lower Fuel Costs

- a. Define SB 350 transportation electrification to be inclusive of renewable hydrogen.
- b. Set targets for technologies and strategies that integrate electric vehicles with the electricity grid.
- c. Require POUs to include electricity rate design details for transportation electrification in their Integrated Resource Plans.



Photo Credits: First Element and Electrify America and the California Fuel Cell Partnership



# 3. ZEV Refueling Infrastructure (1 of 3)

- a. Extend CEC's Clean Transportation Program beyond 2023 and promote ZEV fuels.
- b. Convene a multi-agency working group focused on accelerating heavy-duty and off-road ZEV infrastructure.
- c. Require CALGreen Code to include mandatory installation of level 2 charging.



Photo Credit: Frank Tapia Photography

### 3. ZEV Refueling Infrastructure (2 of 3)

- d.** Exempt sales taxes on ZEV infrastructure.
- e.** Require charging infrastructure at State facilities.
- f.** Provide CEC additional funding for ZEV infrastructure within and near priority populations.
- g.** Direct CEC and CPUC to identify investment priorities for ZEV infrastructure.



### 3. ZEV Refueling Infrastructure (3 of 3)

- h.** Increase funding for ZEV regional readiness planning and implementation.
- i.** Expand focus of transportation funding to reflect freight ZEV infrastructure needs.
- j.** Direct the EPIC program to include research and development into next-generation ZEV infrastructure.





## 4. Local Policies

- a. Provide explicit authority to local jurisdictions to create zero-emission zones.
- b. Provide explicit authority to local governments to implement equitable pricing mechanisms.
- c. Incentivize local governments to develop and implement local ZEV readiness plans.



Photo Credit: David Hawgood



# 5. Fleet Adoption

- a. Building on SB 1014, direct CARB to adopt zero-emission mileage requirements in high-mileage and new mobility fleets.
- b. Direct DGS to establish zero-emission VMT targets for the State's fleet, and set ZEV targets for other vehicles used by the State.
- c. Establish ZEV targets for other government fleets.





# 6. Outreach and Education

- a. Create a State “Electricity Rate” Ombudsperson.
- b. Increase funding for ZEV outreach with a focus on priority populations and heavy-duty fleet operators.
- c. Fund training for local government officials and builders.
- d. Provide funding for CARB to establish partnerships for experimentation.



# 7. Workforce Development

- a. Increase investment programs that target gaps and promote job preparation through partnerships.
- b. Fund research on the job benefits from public investments in ZEVs and strategies to ensure the quality of these jobs.



Photo Credits: Oregon Department of Transportation and Center for Transportation and the Environment

## 8. Program Flexibility

- a. Explore methods to increase flexibility of ZEV program requirements.
- b. Continue to provide six years to spend ZEV incentive funding.



# Next Steps

- ☐ **Approve resolution 20-3**
  - Board supports these recommendations
  - Staff will explore actions to implement recommendations
  - Staff will evaluate comments received and revise report as appropriate
- ☐ **Submit revised report to Legislature**

DRAFT: ASSESSMENT OF CARB'S  
ZERO-EMISSION VEHICLE  
PROGRAMS PER SENATE BILL 498

December, 17 2019

