



Community Truck Listening Session

August 31, 2021

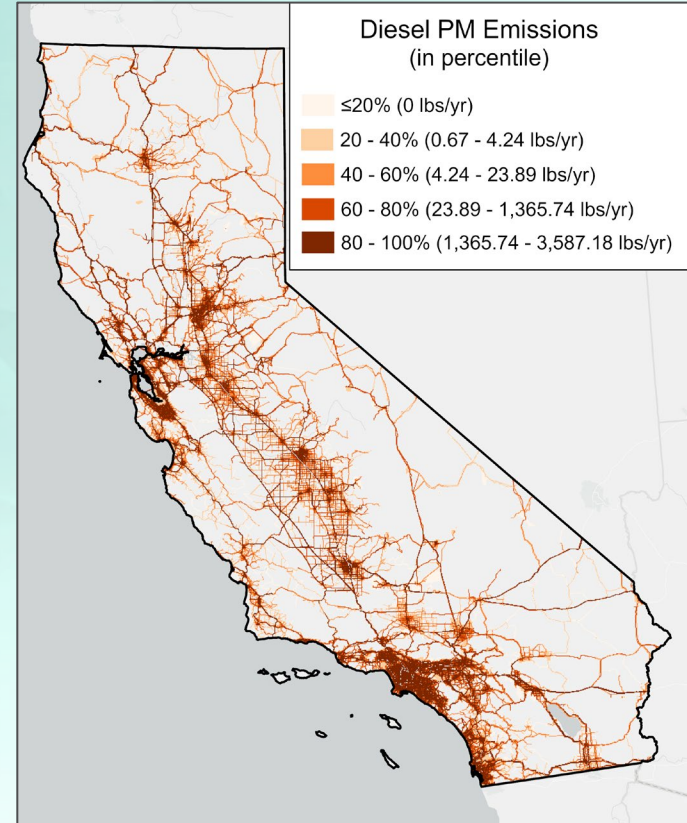
Goals of Today

- Inform attendees on CARB's latest work surrounding cleaning up trucks and transition to zero-emission
- Inform attendees on how to provide input on the proposed Advanced Clean Fleet Regulation
- Listen to concerns or suggestions surrounding trucks

Addressing Truck Emissions is Key

2018 Statewide Diesel Particulate Matter (PM) Emission from Heavy-Duty Trucks

- Darker shades show higher emissions
- Under resourced communities are impacted most



Latest Combustion Requirements

- 2018 – Present:
 - Stricter emission standards
 - Enhanced smoke tests
 - Increased onboard diagnostics
 - Manufacturer emission standard and testing requirements
- By 2023:
 - New inspection and maintenance rules



Latest Zero-Emission Requirements

- 2018 – Present:
 - New powertrain certification
 - Manufacturer sales percentage requirements
 - Required zero-emission phase-in for refrigerated trucks
- By 2023:
 - Required phase in for work trucks, box trucks and tractors



Cleaning Up Existing Diesel Trucks

- New and proposed rules for diesel trucks
 - Increased inspections (like smog checks for heavy-duty)
 - Tightening warranty and smoke test requirements
- Enforcement
 - Reporting requirements
 - Business audits
 - Roadside inspections
 - DMV compliance checks



Transition to Zero-Emission

- Advanced Clean Trucks Regulation
 - Requires manufacturers to sell zero-emission trucks
- Proposed Advanced Clean Fleets Regulation
 - Speeds up purchases of zero-emission trucks and buses
 - Starts with trucks delivering to ports, box trucks, delivery vans
 - 100% zero-emission sales requirement by 2040
- Ensuring success
 - Funding available
 - Recognition for going above and beyond
 - Variety of zero-emission vehicles available



Proposed Milestones in Advanced Clean Fleet Regulation

- Drayage trucks
 - 2023 – Newly registered vehicles must be zero-emission
 - 2035 – 100% zero-emission operations in intermodal railyards and seaports
- High Priority Fleets
 - 2025 – Begin phase-in of zero-emission vehicles by body type and suitability
 - 2035 – 100% zero-emission for box trucks, vans, buses & yard tractors
- Public fleets
 - 2024 – 50% of new vehicle purchases must be zero-emission
 - 2027 – 100% of new vehicle purchases must be zero-emission
- Manufacturers
 - 2040 – 100% zero-emission vehicle sales requirement

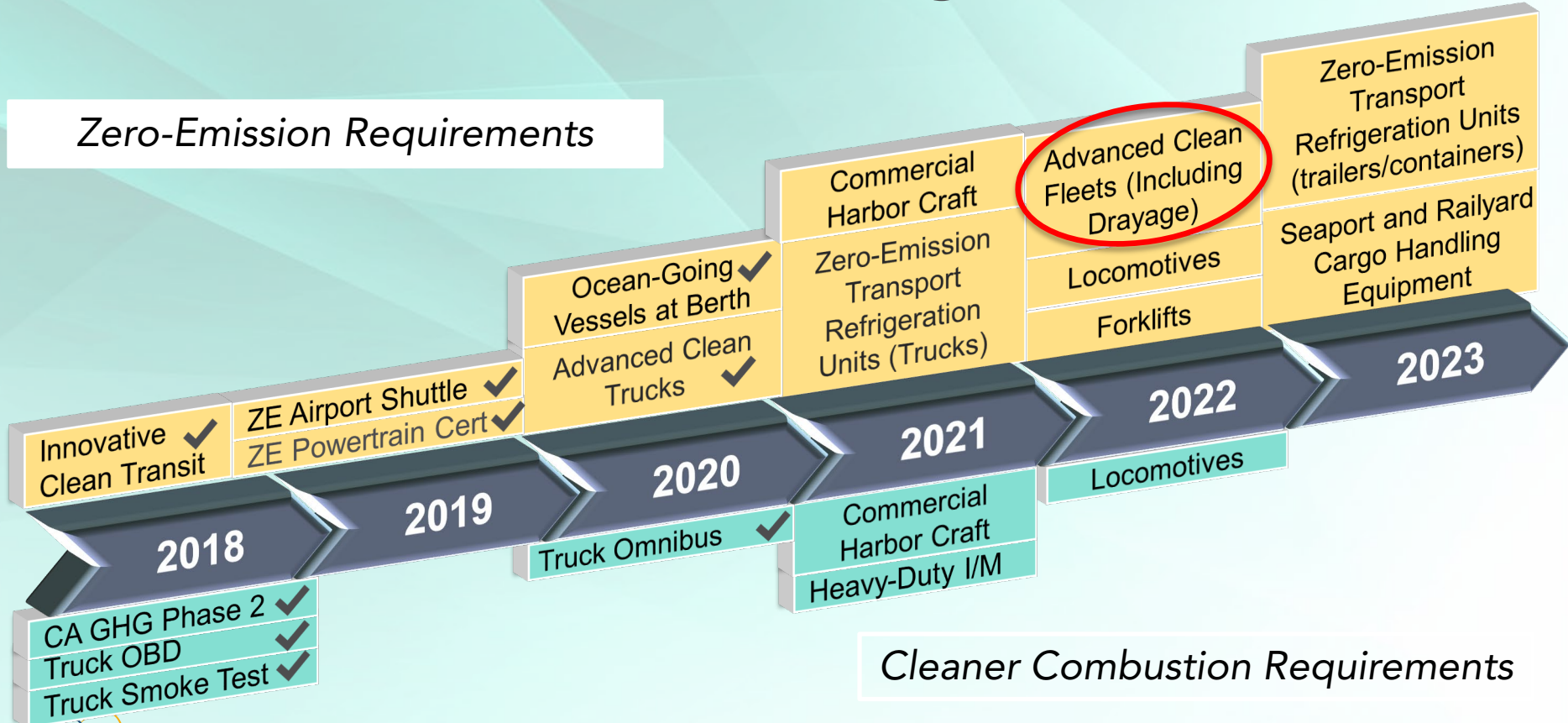
Goals of Today

- Share your concerns or suggestions around trucks:
freight@arb.ca.gov
- Share feedback on the proposed Advanced Clean Fleet Regulation: zevfleet@arb.ca.gov
- Visit Advanced Clean Fleet Regulation website:
<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>

Supplemental Slides

Suite of CARB Regulations

Zero-Emission Requirements



Cleaner Combustion Requirements

Proposed Advanced Clean Fleet Regulation

High Priority Fleets

- “High-Priority Fleets” must phase-in zero-emission vehicles by body type and suitability
- **Who are “High-Priority Fleets”?**
 - Private or federal entities with over \$50 million in revenue,
 - Who operate a fleet of more than 50 vehicles,
 - Or dispatches more than 50 vehicles per year.



Proposed Advanced Clean Fleet Regulation Phase in for High Priority Fleets

Percentage of fleet that must be ZEVs	10%	25%	50%	75%	100%
Box trucks or vans, two-axle buses, yard tractor	2025	2028	2031	2033	2035
Work trucks, day cab tractors, three-axle buses	2027	2030	2033	2036	2039
Sleeper cab tractors and specialty vehicles	2030	2033	2036	2039	2042

Proposed Advanced Clean Fleet Regulation Drayage Fleets

- **2023** – All drayage trucks registering for the first time in the CARB Drayage Truck Registry must be a zero-emission vehicle
- **2035** – 100% zero-emission operations in intermodal railyards and seaports



Proposed Advanced Clean Fleet Regulation Public Fleets

- Zero-emission vehicle purchase requirements for city, county, special district, and state agency fleets
- **2024** – 50% of new vehicle purchases must be zero-emission
- **2027** – 100% of new vehicle purchases must be zero-emission



Voluntary Recognition Program in Development

- Recognition for fleets who exceed zero-emission fleet standards
- Recognition for entities that hire fleets who meet or exceed zero-emission fleet standards
- Branding and marketing to accelerate the deployment of medium- and heavy-duty zero-emission vehicles



Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)

- Point-of-sale discounts to power California communities and drive commercial technology transformation
- 7,000+ clean vehicles funded
- 58% in pollution-burdened communities
- Program website: <https://californiahvip.org/>



Volkswagen Environmental Mitigation Trust

- Provides ~\$423 million to mitigate the excess emissions caused by Volkswagen's emission testing defeat devices
- Funding focused mostly on "scrap and replace" projects for heavy-duty equipment and trucks
- Program website: <https://ww2.arb.ca.gov/our-work/programs/volkswagen-environmental-mitigation-trust-california>

Proposed Heavy-Duty Inspection and Maintenance Regulation (HDIM)

- Legislative requirement of SB210 to create an inspection program for on-road heavy-duty vehicles
- Regulation is still being finalized, participate to include your feedback
- Program website: <https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program>


Transport Refrigerated Units (TRU)


- TRUs are used to control the environment of temperature-sensitive products transported in trucks, trailer, rail cars, or shipping containers
- Existing regulation requires TRU owners to upgrade to cleaner diesel equipment over time
- Amendments are being developed to transition truck TRUs to zero-emission
- Program website: <https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit>

Advanced Clean Trucks Regulation

- Manufacturers required to meet ZE percentage milestones for annual sales
- Begins with 2024 model year
- One-time reporting requirement for large entities that operate or dispatch trucks in California
- Program website: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>

The Governor's Executive Order Targets

 **100% ZEV sales** by 2035

Full transition to **ZEV short-haul/drayage trucks** by 2035 

 Full transition to **ZEV buses & heavy-duty long-haul trucks** by 2045* 

 Full transition to **ZE off-road equipment** by 2035*
*where feasible