



Projects and Contracts with Proposed Grant Awards Over \$100,000

Mobile Source Committee Meeting
October 24, 2019

Hannah Cha
Staff Specialist
Strategic Incentives Division



❖ Background

❖ Proposed projects with awards over \$100,000

❖ Overview of Fiscal Year Ending (FYE) 2020 funds

- Status of funding
- Awards by project type and county

❖ Recommended Actions



Carl Moyer Program and Mobile Source Incentive Fund

❖ Carl Moyer Program (CMP)

- Created in 1998 to reduce emissions from heavy-duty engines
- Voluntary program that funds surplus emission reductions

❖ Mobile Source Incentive Fund (MSIF)

- Assembly Bill (AB) 923 allowed for additional \$2 motor vehicle registration fee surcharge (12/04)
- CMP and Lower Emission School Bus Program (LESBP) projects eligible for MSIF funding



Community Health Protection Grant Program (CHP)

- ❖ Created by AB 134 (2017) appropriation of \$50 million (M) from the Greenhouse Gas Reduction Fund (GGRF) to reduce mobile source emissions including criteria pollutants, toxic air contaminants, and greenhouse gases in Bay Area AB 617 communities
- ❖ Senate Bill 856 (2018) continued support for these projects awarding \$40M for emission reduction projects under the CMP, Proposition 1B Goods Movement Emission Reduction Program, and select stationary sources



❖ On February 6, 2019, Air District Board of Directors

- Approved participation in CMP Year 21
- Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000

❖ On April 3, 2019, Air District Board of Directors

- Approved acceptance of SB 856 grant funding for the Community Health Protection Grant Program (CHP)



CMP/MSIF & CHP Project Recommendations Over \$100k

❖ **\$9,643,718 in total awards for 11 projects to replace:**

- Six (6) pieces of off-road agricultural equipment
- Nine (9) pieces of off-road equipment
- Six (6) marine engines
- 18 school buses

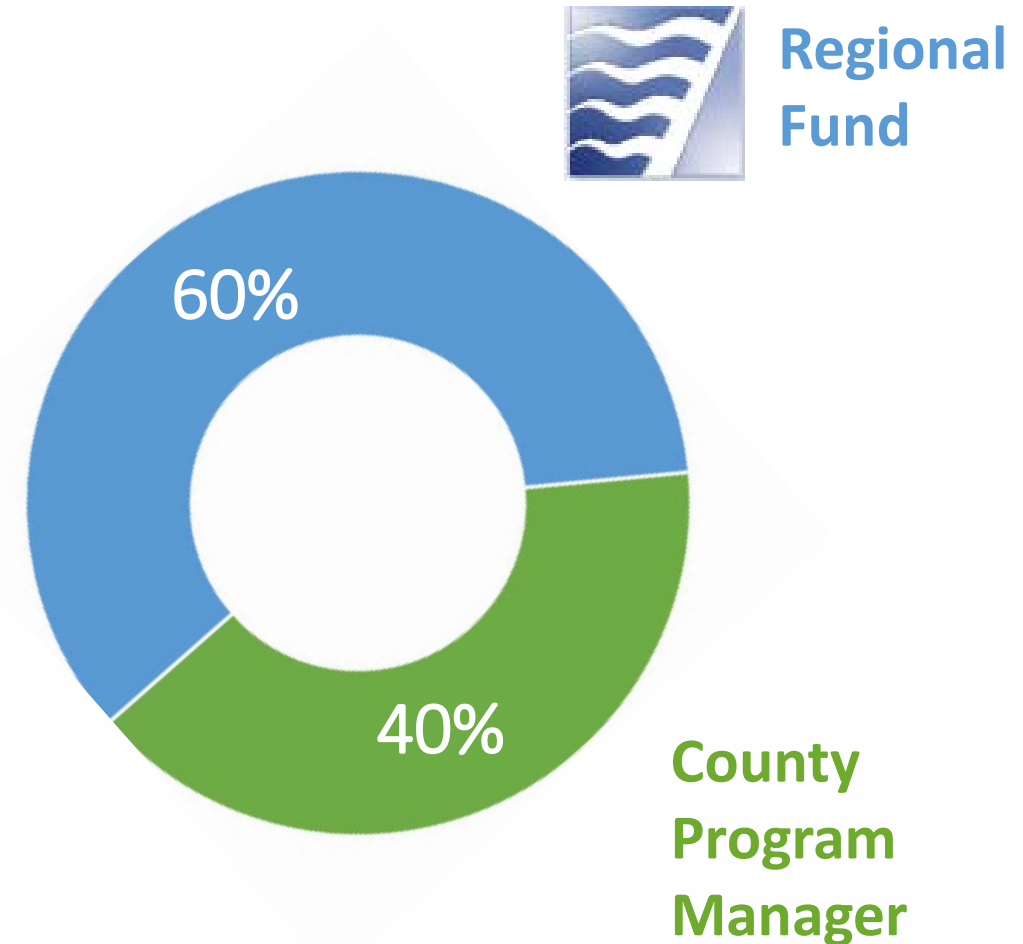
❖ **Emission reductions:**

- Over 28 tons per year (TPY) of criteria pollutants



Transportation Fund for Clean Air (TFCA)

- ❖ Statutory authority set forth in California Health and Safety Code Sections 44241 and 44242
- ❖ Funding provided by a \$4 surcharge on motor vehicles





❖ On April 3, 2019, Air District Board of Directors:

- Allocated \$32.3M of TFCA funds for FYE 2020 projects
- Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000

❖ On June 5, 2019, Air District Board of Directors:

- Adopted policies and evaluation criteria for the FYE 2020 TFCA Regional Fund program



TFCA Project Recommendations Over \$100k

- ❖ **\$2,416,000 in total awards for Seven (7) projects**
 - 15 level 2 and 1 DC fast electric vehicle charging stations
 - 1 on-demand shuttle project pilot and 2 existing shuttle services (11 routes)
 - 0.2 miles of class I bikeway
 - 80 electronic bicycle lockers and a bike station with 270 new secure bicycle parking spaces

- ❖ **Emission reductions**
 - Over 11 TPY of criteria pollutants



Status of Incentive Funding Awarded Since July 2019, by Funding Source









* Includes awards from FYE 2019



Funds Recommended & Awarded by Project Category Since July 2019

Total = ~\$28 M

List of projects is shown in Attachments 2 and 3

					
Light-duty Cars & Infrastructure	On-road Trucks & Buses	School Buses	Off-road	Off-road Marine & Locomotive	Trip Reduction
\$4.5 M	\$722 k	\$4.2 M	Ag: \$2.5 M Non-Ag: \$3.3 M	\$8.4 M	\$4.6 M

* Includes awards from CMP/MSIF/CHP/FARMER, TFCRA Regional Fund, Reformulated Gasoline Fund, and Carbon Offset Fund.

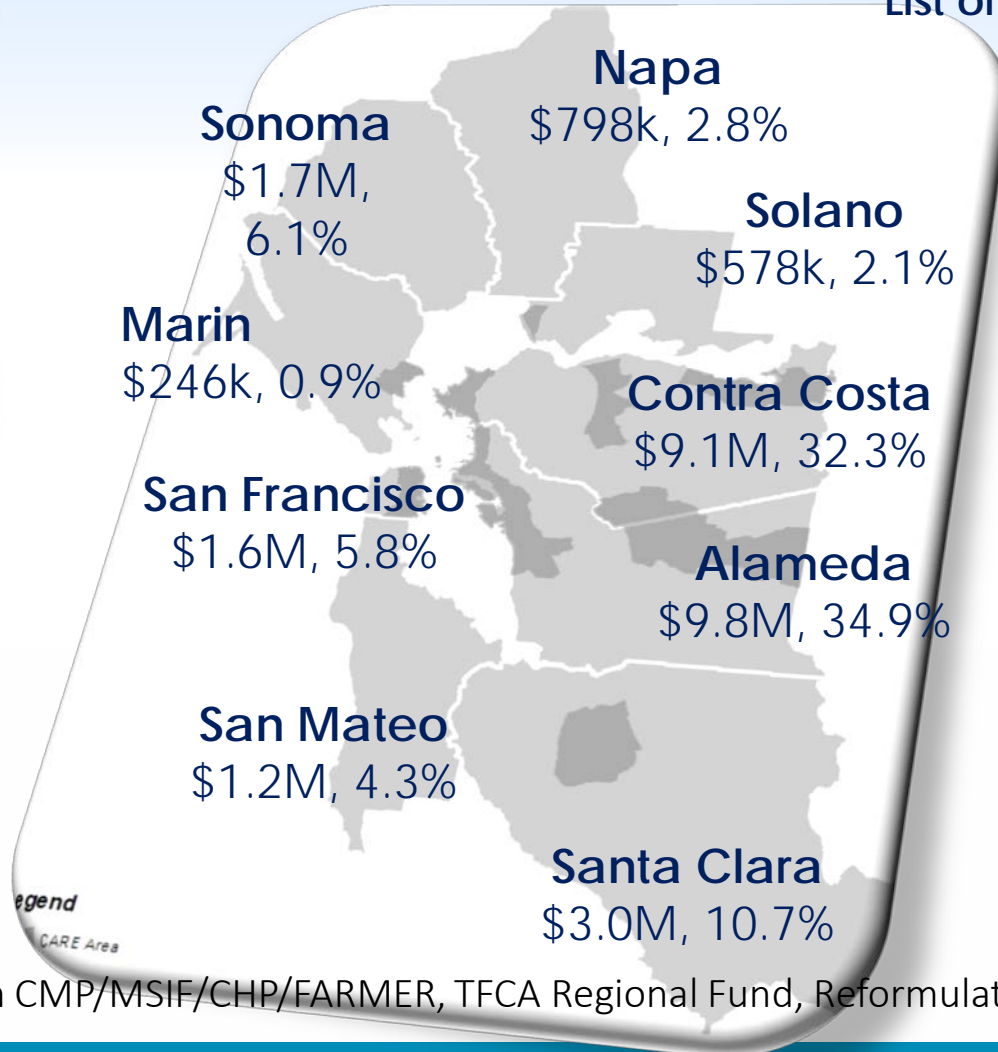


Funds Recommended & Awarded by County Since July 2019



List of projects is shown in Attachments 2 and 3

Total = \$~28 M



* Includes awards from CMP/MSIF/CHP/FARMER, TFCA Regional Fund, Reformulated Gasoline Fund, and Carbon Offset Fund.



Status of Solicitations

Program Name, Description, and Website	Status	Source
Carl Moyer Funding to replace heavy-duty on & off-road vehicles and equipment, marine engines, and locomotives www.baaqmd.gov/moyer	Open	CMP, MSIF, CHP, FARMER
Vehicle Buy Back Funding to scrap 1996 or older light-duty cars www.baaqmd.gov/vbb	Open	MSIF
Clean Cars for All Funding for low-income owners to retire and replace their vehicles with a cleaner option www.baaqmd.gov/cleancarsforall	Open	California Climate Investments
Vehicle Trip Reduction Funding for projects to reduce single-occupancy vehicle trips www.baaqmd.gov/tripreduction	Open	TFCA
West Oakland Zero-Emission Funding to accelerate the adoption of zero-emission vehicles and equipment operated in West Oakland www.baaqmd.gov/WestOaklandZEV	Open	RFG

Additional grant programs for other project categories scheduled to open later this year



Recommended Actions

Recommend the Board of Directors:

1. Approve recommended projects with proposed grant awards over \$100,000 as shown in Attachment 1; and
2. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.



Bay Area Air Quality Management District
Mobile Source Committee

Proposed Updates to the Transportation Fund for Clean Air County Program Manager Fund Policies for Fiscal Year Ending 2021

Mobile Source Committee Meeting
October 24, 2019

Betty Kwan
Staff Specialist
Strategic Incentives Division

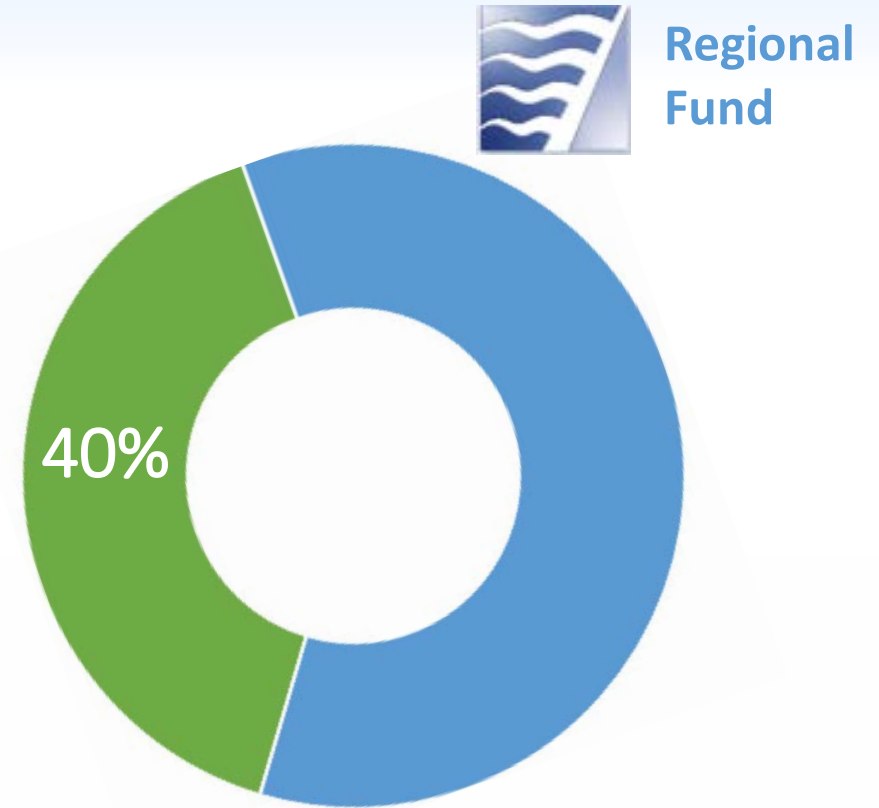


- ❖ **Background**
- ❖ **Proposed updates to County Program Manager (CPM) Policies for Fiscal Year Ending (FYE) 2021**
 - Outreach process
 - Summary of proposed updates
 - Next steps
- ❖ **Recommended Actions**



Transportation Fund for Clean Air (TFCA)

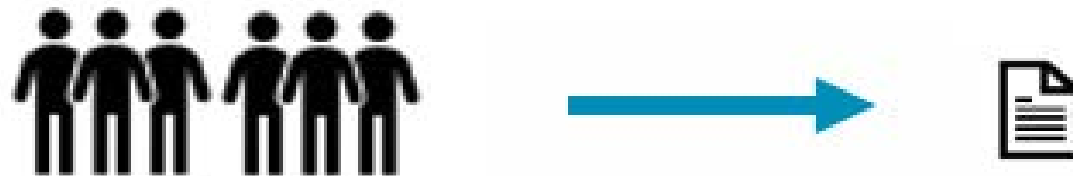
- ❖ TFCA funding authorized by State Legislature to help reduce on-road mobile source emissions
- ❖ \$4 motor vehicle registration surcharge fee with 40% of funds distributed to the Nine (9) Bay Area congestion management agencies
- ❖ Staff brings updates to TFCA CPM policies to Air District Board annually for approval





Process

- ❖ Five workgroup meetings: January 16, 2019, February 17, 2019, May 8, 2019, August 12, 2019, and September 24, 2019
- ❖ Released draft policies for comment on February 20, 2019 – August 28, 2019
- ❖ Received written comments from three (3) CPMs
- ❖ Proposed policies include input from CPMs





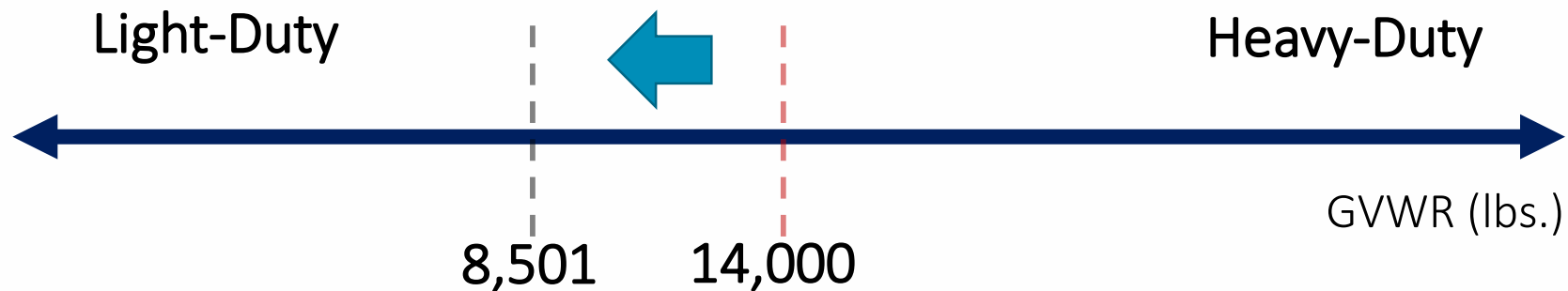
Summary of Proposed Updates for FYE 2021

- ❖ Clarification to policy #2 on cost-effectiveness (CE) limit for Bikeways & Bicycle Parking under Bicycle Projects category
- ❖ Increase CE limit for ***Alternative Fuel Light-Duty Vehicles & Heavy-Duty Vehicles and Buses***
- ❖ Revise eligible vehicles for ***On-Road Goods Movement Truck and Bus Replacements*** to clarify intention to support diesel-to-diesel replacement of trucks not yet able to transition to zero-emissions technology
- ❖ Text revisions to provide clarification on existing policies



Summary of Proposed Updates for FYE 2021 (Cont.)

- ❖ Policy#22 & 24: adjust gross vehicle weight rating (GVWR) limit to reclassify vehicles between 8,501-14,000 lbs. to allow these vehicles to be funded as ***Alternative Fuel Heavy-Duty Vehicles and Buses***





Next Steps for Future Cycles

- ❖ **Continue coordinating with CPMs on program refinements**
 - Evaluate CE limit for select project categories
 - Review methodology for CE evaluation of bicycle projects
 - Provide further guidance on evaluation of Pilot Trip Reduction projects
 - Review mechanisms for project reporting



Recommended Action

Recommend the Board of Directors:

1. Approve the proposed updates to the Transportation Fund for Clean Air County Program Manager Fund policies for FYE 2021.



Diesel Free by '33: Update on Zero-Emission Medium- and Heavy-Duty Mobile Source Technologies

Mobile Source Committee Meeting
October 24, 2019

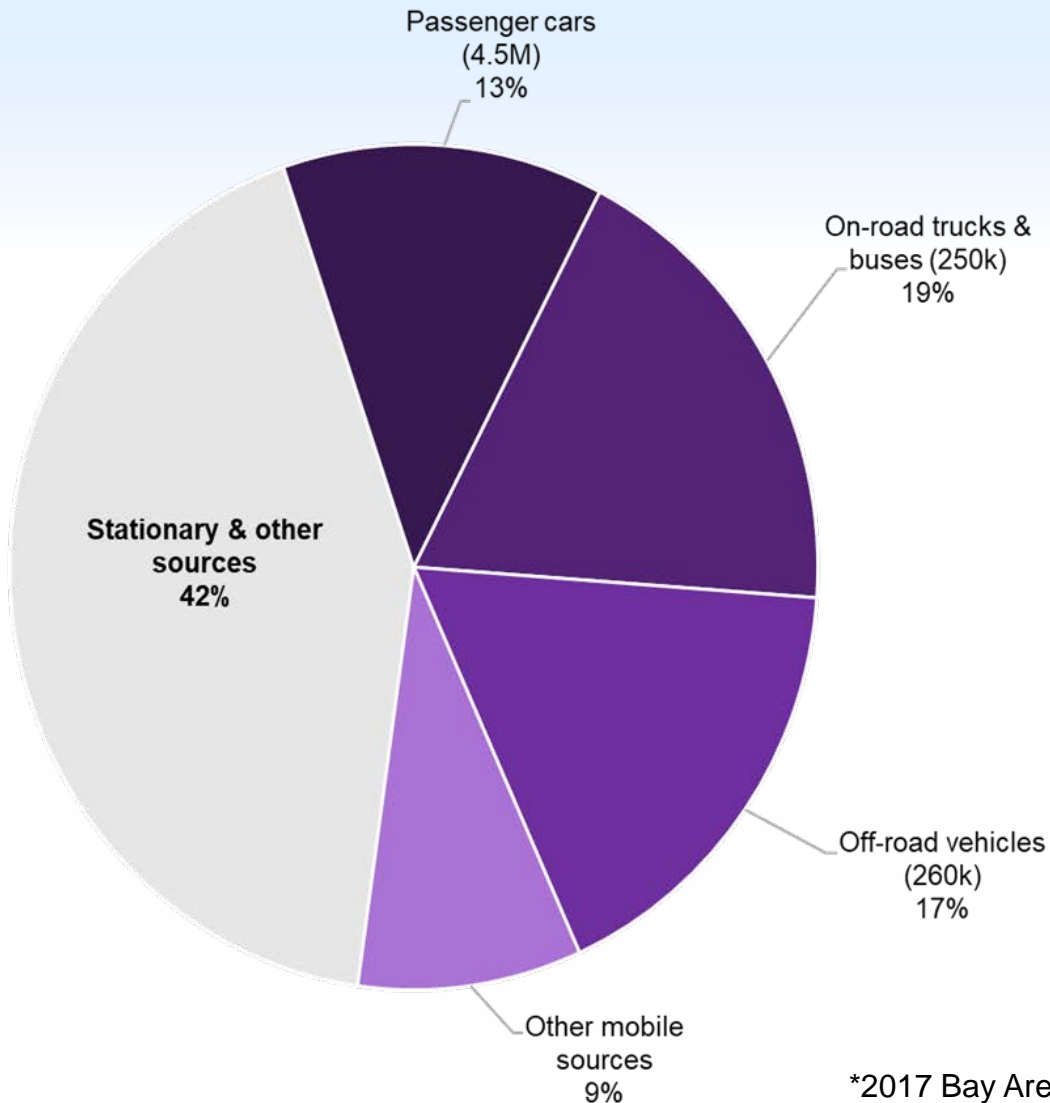
Amy Dao & Sean Newlin
Staff Specialists
Strategic Incentives Division



- ❖ Background
- ❖ Structure and Summary of the Report
- ❖ Technology Readiness Level Status for Medium- and Heavy-Duty Vehicle and Equipment Types



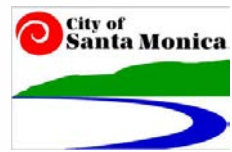
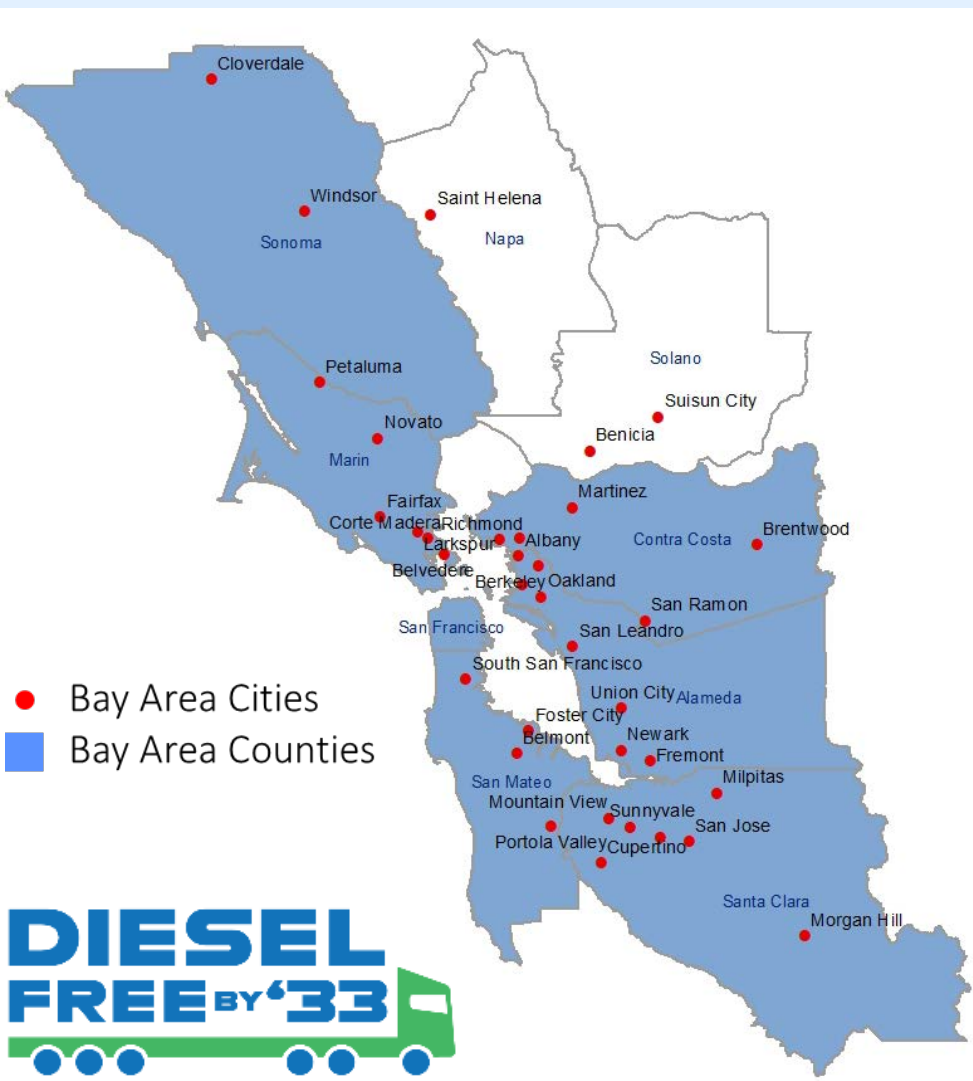
Background: Bay Area Emissions of Ozone Precursors and Particulate Matter (PM) 2.5



*2017 Bay Area Clean Air Plan

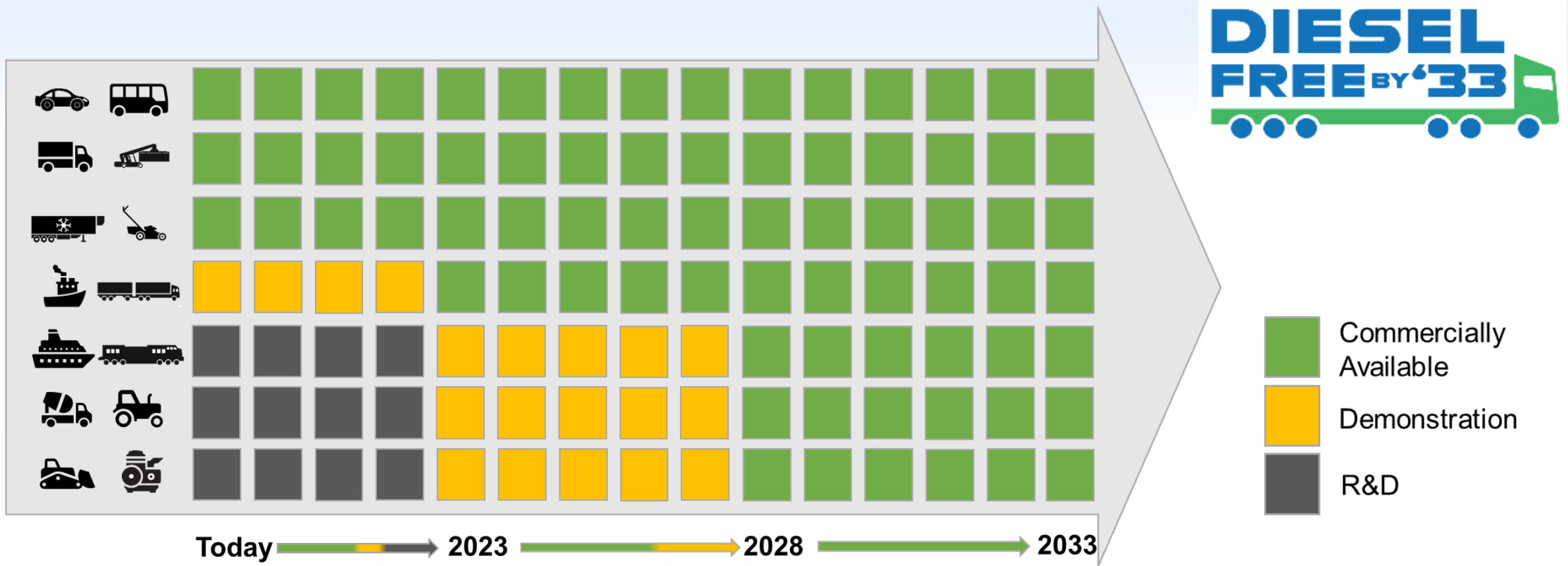


Background: Diesel Free by '33




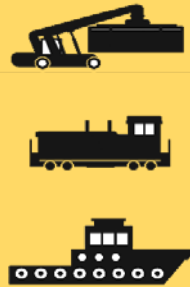




Pathway to Diesel Free by '33





Readiness of Zero-Emission Technologies

Technology Readiness Level	Vehicle or Equipment Category	
Commercially Available	Airport Ground Support Equipment Buses Cargo Handling Equipment Construction Equipment: <i>Stationary Cranes</i> <i>Light Payloads</i> On-Road Trucks	
Demonstration	Cargo Handling Equipment: <i>Reach Stackers</i> <i>Heavy-Duty Forklifts</i> <i>Top Handlers</i> Commercial Harbor Craft Locomotives	
Research	Ocean-Going Vessels	
No Information Available	Construction Equipment: <i>Crawler Cranes</i> <i>Heavy Payloads</i> <i>Specialized Equipment</i>	



On-Road: Trucks & Buses

❖ Buses

- **Commercially available: 15 Original Equipment Manufacturers (OEM) and 54 models**
- Required purchases through the Innovative Clean Transit Rule

❖ Trucks

- **Commercially available: 3 Class 7-8 models for short-haul**
- Demonstration: 4 OEMs testing Class 8 long-haul tractors





Off-Road: Airport Ground Support Equipment

❖ Commercially Available:

- Air Conditioners; Baggage Tractors; Belt Loaders; Hydrant Carts; Lavatory Trucks; Passenger Stands; Pushbacks; Water Trucks



❖ Demonstration

- Cargo Tractors; Catering Trucks; Fuel Trucks; Sweepers



❖ No Information Available

- Air Starts; De-Icers; Service Trucks





Off-Road: Cargo Handling Equipment

❖ Commercially Available:

- Automated Guided Vehicle; Ship-to-Shore Gantry Crane; Side Handler; Straddle Carrier; Yard Crane; Yard Hostler

❖ Demonstration

- Heavy-Duty Forklifts; Reach Stackers; Top Handlers





Off-Road: Construction Equipment

❖ Commercially Available:

- Boom Lifts; Concrete Mixers; Dumpers
Loaders; Mini Cranes; Mini Excavators; Tippers;
Tower Cranes



❖ Demonstration:

- Dozers; Excavators; Graders



❖ No Information Available:

- Crawler Cranes; Crushers; Pavers; Rollers;
Scrapers; Trenchers





Off-Road: Marine Vessels

❖ Demonstration:

- Commercial Fishing; Ferries; Tugboats; Workboats



❖ Research:

- Excursion Vessels; Pilot Boats; Research Vessels; Ocean Going Vessels



❖ No Information Available:

- Crew and Supply Vessels; Charter Fishing





Off-Road: Locomotives

❖ Demonstration:

- Electric Yard Switcher at the San Pedro Ports
 - 2.9 MWh battery
 - Up to 12 hours of full charge
- Electric “consist” in San Joaquin Co.
 - 2.4 MWh battery
 - 30 minutes of full charge





Next Steps

- ❖ Regularly update assessment
- ❖ Version 3.0 to include zero-emission technologies for stationary engines and light-duty vehicles

Commercially Available
Demonstration
R&D

