



AGENDA: 4

Bay Area Air Quality Management District
Mobile Source Committee

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

July 25, 2019

Betty Kwan
Staff Specialist



- ❖ Background
- ❖ Proposed projects with awards over \$100,000
- ❖ Overview of Fiscal Year Ending (FYE) 2019 funds
 - Awards by project type and county
 - Status of funding
- ❖ Recommended Action



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 appropriation of \$250 Million (M) from the Greenhouse Gas Reduction Fund (GGRF) to reduce mobile source emissions including criteria pollutants, toxic air contaminants, and greenhouse gases in AB 617 communities
- ❖ Bay Area Air Quality Management District (Air District) allocated \$50M of these funds for emission reduction projects under the CMP, and optionally under the Proposition 1B Goods Movement Emission Reduction Program



❖ On 2/21/18 Air District Board of Directors

- Approved participation in CMP Year 20
- Authorized the Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000

❖ On 12/20/17 Air District Board of Directors

- Approved acceptance of \$50M in AB 134 funding for the Community Health Protection Grant Program (CHP)



Project Recommendations Over \$100k

- ❖ **\$3,342,059 in total awards for six (6) projects to replace:**
 - Six (6) pieces of off-road agricultural equipment
 - Two (2) off-road loaders
 - One (1) excavator
 - Seven (7) forklifts
 - Nine (9) transit buses
 - Five (5) school buses

- ❖ **Emission reductions**
 - Over 4.9 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:
 - 60% of TFCA funds awarded directly by the Air District (*Regional Fund & Air District-Sponsored*)
 - Remaining 40% is distributed to the 9-Bay Area Congestion Management Agencies (*County Program Manger Fund*)



TFCA (Cont'd)

❖ For FYE 2019, Air District Board

- Allocated \$20.44M and authorized the Executive Officer/APCO to execute contracts & amendments with grant awards up to \$100,000 (5/2/18)
- Adopted TFCA Regional Fund program policies & evaluation criteria (6/6/18)

❖ For FYE 2020, Air District Board

- Allocated \$32.30M and authorized the Executive Officer/APCO to execute contracts & amendments with grant awards up to \$100,000 (4/3/19)
- Adopted TFCA Regional Fund program policies & evaluation criteria (6/5/19)



TFCFA Project Recommendation Over \$100k

- ❖ **\$700,000 in total awards for one (1) project**
 - Construct 3.03 miles of Class I and IV bikeways in the City of Vallejo along the San Francisco Bay Trail & the Napa Valley Vine Trail to close the gap between the Vallejo Ferry Terminal and the City of American Canyon

- ❖ **Emission reductions**
 - Over 0.1 TPY of criteria pollutants



Commercial Lawn & Garden (CLG) Equipment Exchange Program

❖ Carbon Offset Fund established by a settlement agreement

- To achieve greenhouse gas emissions reductions in the Bay Area with funding prioritized for projects located in cities of Rodeo, Hercules, Crockett, & Pinole, then Alameda and Contra Costa counties, then the entire Air District area
- \$4.4M received by Air District in 2009 for eligible grant projects
- \$171K available in FYE 2019

❖ On 2/17/16 Air District Board of Directors authorized

- Allocation of Carbon Offset Fund balance to implement CLG Program that provides full cost-recovery for eligible replacement of diesel equipment for zero emission
- Executive Officer/APCO to enter into funding agreements and contracts up to \$100,000



CLG Project Recommendation Over \$100k

- ❖ **\$103,115*** in total awards for one (1) project in City of Berkeley to replace
 - 13 leaf blowers
 - 18 grass and hedge trimmers
 - Three (3) lawn mowers
 - Three (3) chainsaws
 - One (1) edger

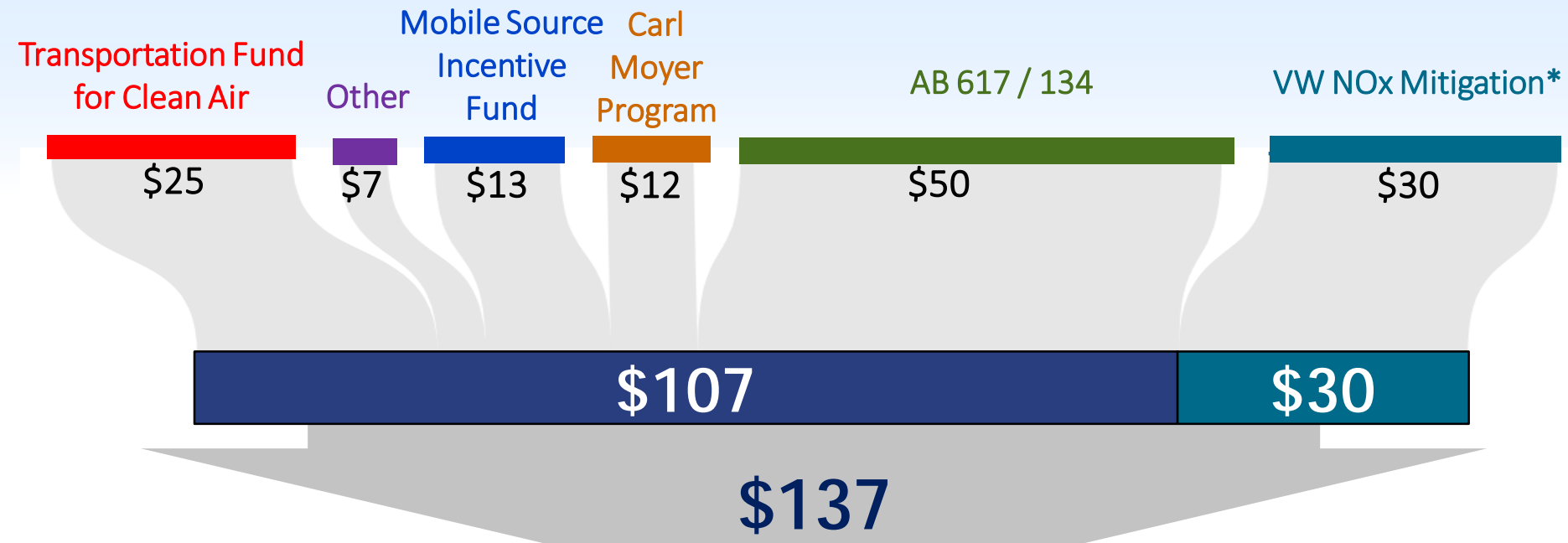
* The award amount for this project consists of \$99,972.90 that was previously awarded and the proposed additional award of \$3,141.10

- ❖ **Emissions reductions (TPY):**
 - Approximately 86 TPY of CO₂



Projected New Grant Revenues for FYE 2019

\$137 (in Millions)



Carl Moyer Category Includes Funding From:
 CMP Year 20
 CMP Statewide Funds
 FARMER (agriculture only)
 LCFS - Low Carbon Fuel Standard

Other Funding Sources:
 EFMP – Enhanced Fleet Modernization Program
 RFG – Reformulated Gasoline Settlement Fund
 DERA – Diesel Emissions Reduction Act
 Zero-Emission Hydrogen Ferry Demonstration Project
 Carbon Offset Fund

*Total Volkswagen (VW) funding is \$423M statewide, which will be dispersed over ~5 year period. Staff projects that as much as 33% of funding could go to projects located in the Bay Area.



Funds Recommended & Awarded by Project Category Since July 2018

Total = ~\$69M

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

\$8.9M

\$4.6M

\$18.0M

Ag: \$4.4M
Non-Ag:
\$5.9M

\$16.1M

\$11.3M

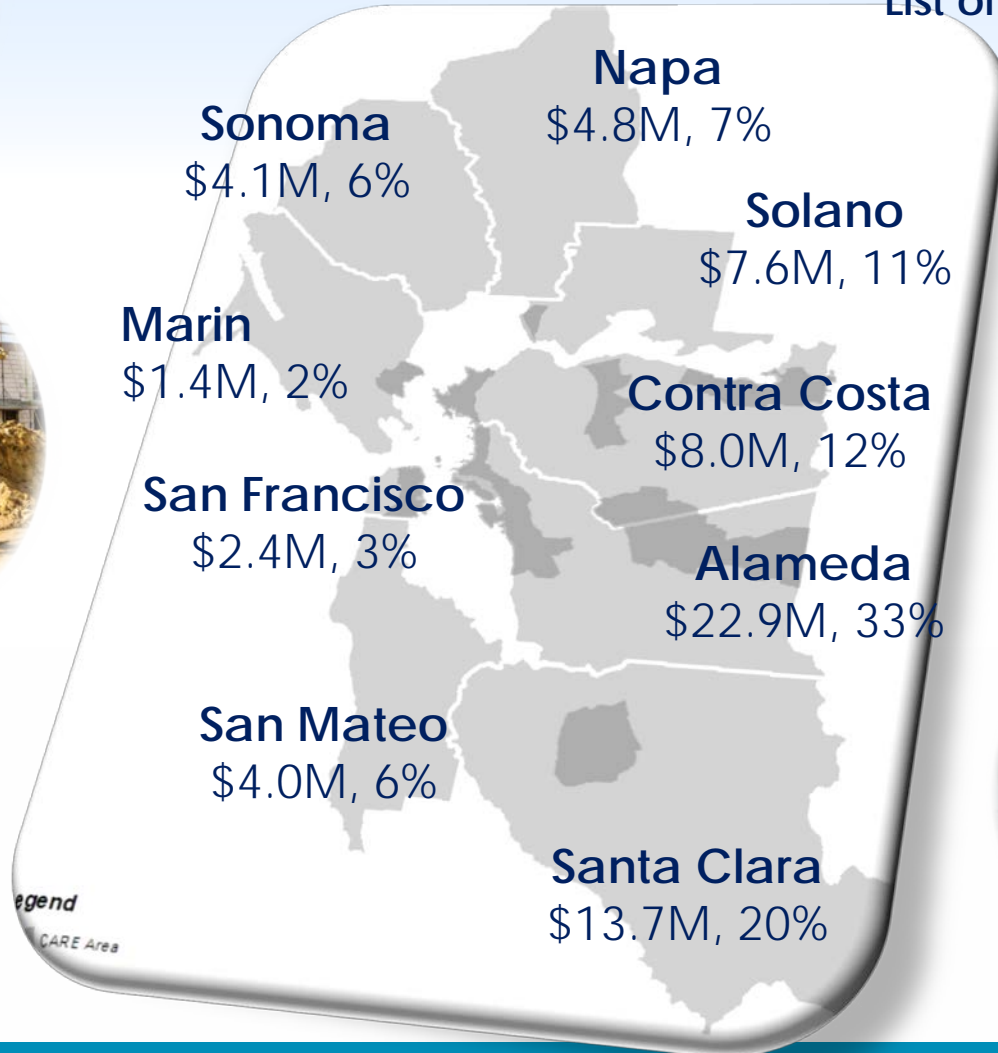


Funds Recommended & Awarded by County Since July 2018



List of projects is shown in Attachments 2 and 3

Total = \$~69M





Status of Incentive Funding Awarded

Since July 2018, by Funding Source



* Includes awards from FYE 2018
 ** Other includes RFG 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
Single-Vehicle Trip Reduction Funding for service and bicycle infrastructure projects to reduce single-occupancy vehicle trips www.baaqmd.gov/grants	Scheduled to open in mid-2019	TFCA

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

Senate Bill 1
Truck and Bus Regulation
Enforcement through Department
of Motor Vehicles Registration



BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

JULY 25, 2019

Overview

- Truck and Bus Regulation overview
- The New law
- Scale of Impact
- Enforcement Activities
- Outreach Efforts
- Funding Opportunities



On-Road Heavy-Duty Vehicle Health Impacts

- On-road, Heavy-duty diesel vehicles above 14,000 lbs. Gross Vehicle Weight Rating (GVWR) are responsible for:
 - 1/3 of the NO_x emitted by all sources in California
 - 90% of the diesel PM emitted from all diesel powered equipment
- Impacts residences, schools, businesses, etc. near roadways with diesel vehicle traffic

Diesel exhaust harms health

- Contains more than 40 toxic air contaminants
- Causes immediate irritation and aggravates asthma
- Long term exposure increases risk of cancer
- Children, the elderly and people with emphysema, asthma, and chronic heart and lung disease at most risk

70% of airborne cancer risk stems from diesel exhaust particles



Truck and Bus Regulation

Applies to the 1M Trucks operating in California

400k registered in CA

Medium- and Heavy- Duty
Trucks

Over 14k lbs gross vehicle
weight rating

Adopted in 2008 to protect health by reducing exposure to harmful PM and NOx emissions from trucks and buses

- Critical component of CARB's Diesel Risk Reduction Plan
- Centerpiece of 2023 SIP strategy
- Amended in 2010 and 2014 to provide additional compliance flexibility and time

Truck and Bus Regulation Requirements

- Requires replacement or repower of most medium-and heavy-duty diesel trucks and buses with engines older than 2010 by 2023
- Only two ongoing alternate compliance options
 - Low-Use: <1,000 miles per year
 - NOx exempt areas: For vehicles that operate only in areas that attain both the federal and State NOx standards
 - No engine turn-over requirement
 - Must have PM filter on all trucks in fleet to protect and exposure to toxic diesel PM
 - Can not operate outside of NOx exempt areas

Compliance is critical, but has been a challenge

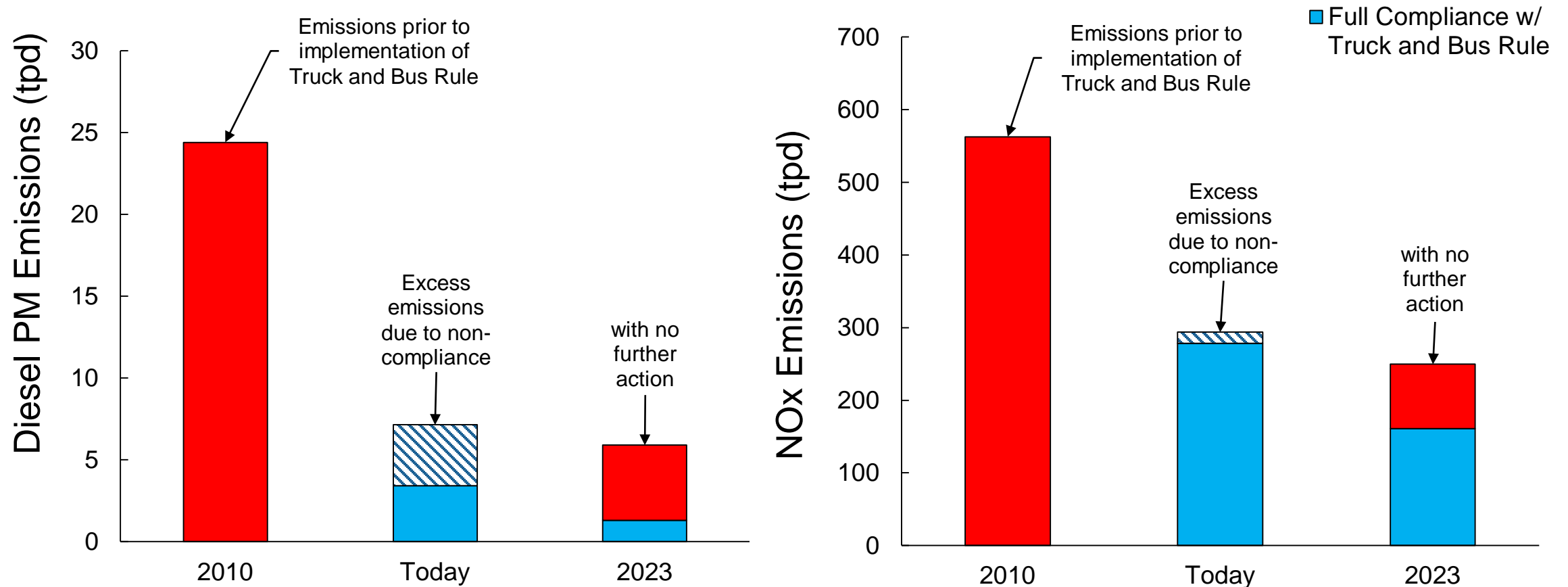
- Prior to 2018, compliance rate 70-75%
- Past enforcement consisted of fleet audits and roadside check points
- Protect communities, especially the most vulnerable members
- All business compete fairly
- Meet federal and State clean air requirements



Significant health impacts, impacting disadvantaged communities

Uneven playing field for businesses that have paid to comply

Full compliance needed to reach goals



New law requires CARB Truck & Bus Regulation compliance for DMV registration



Requires compliance demonstration prior to registration

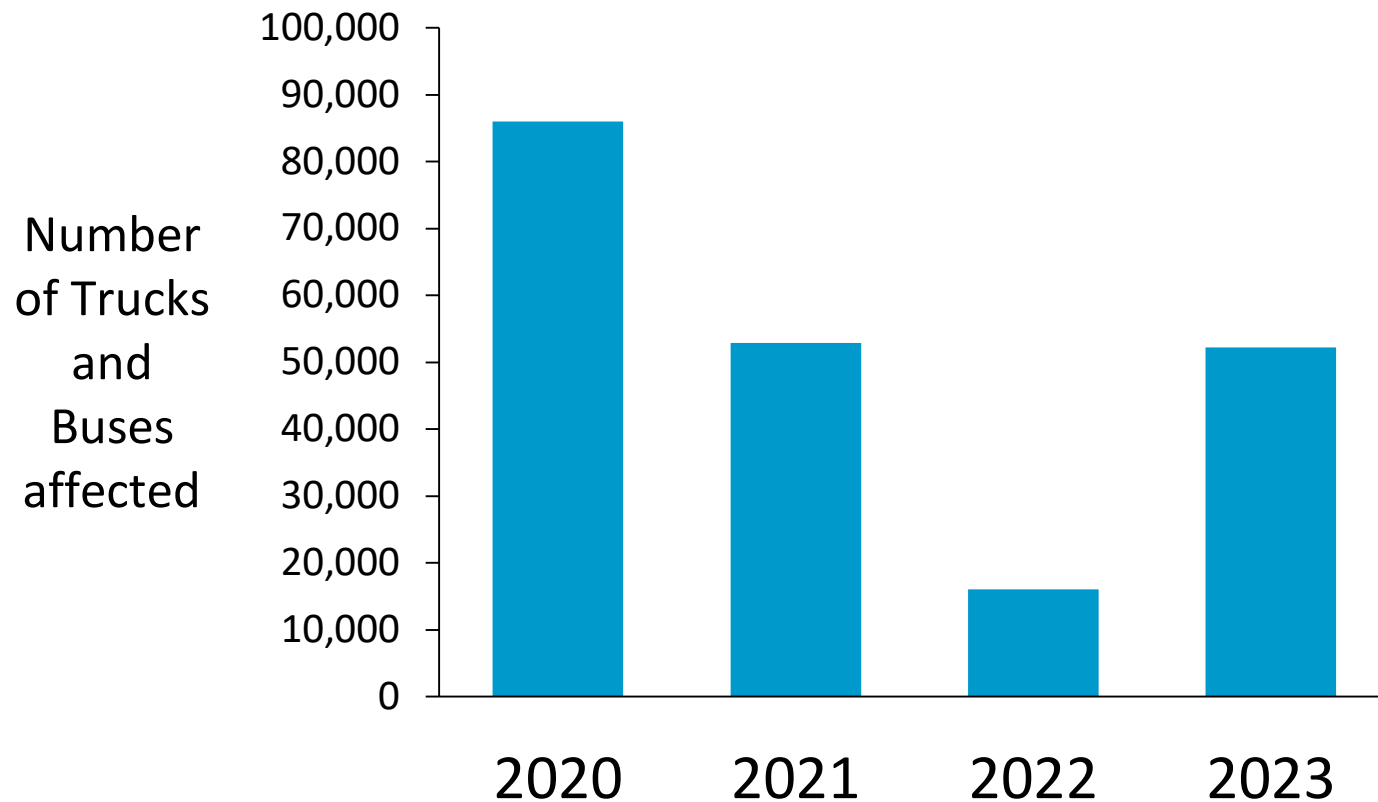


Phases in verification starting January 1, 2020



Allows for temporary permits to operate while issues are resolved

Over 200,000 trucks and buses affected



- 2023 is the final deadline for engine replacement
- Many fleets need to take action from 2020-2023 to stay in compliance

Heavy-Duty Vehicles >14,000 lbs. Registered in the BAAQMD

49,500

Registered heavy-duty diesel
vehicles >14,000 lbs. GVWR



22,500 HHD
> 26,000 GVWR



27,000 MHHD
14,001-26,000 GVWR

33,000

Must act to
comply by 2023

66%



13,500 HHD
> 26,000 GVWR



19,500 MHHD
14,001-26,000 GVWR

Enforcement efforts have been upgraded

- Goal is to level playing field while improving air quality
- 82,000 California registered trucks not compliant today
- Implemented Streamlined Truck Enforcement Process
 - Uses registration, reporting and inspection data to identify compliance status
 - Notices of Non-Compliance followed by Notice of Violation
 - Over 15,000 Notices of Non-Compliance sent addressing nearly 30,000 trucks
 - Over 15,000 DMV registration holds placed

Compliance Assistance

- Outreach to the regulated community
- Financial Assistance

Outreach efforts are varied

BROAD OUTREACH

- **DMV Outlets** – videos, posters, booklets, FAQ sheets
- **Industry Coordination** – magazines, newsletters, events
- **TruckStop Website Redesign** – streamlined and intuitive
- **Contracted Media Campaign** – billboards, pump toppers, publication ads, interviews, radio ads, social media, digital ads

DIRECT OUTREACH

- **CARB/DMV deadline reminders** sent based on vehicle model years
- **Mailers** sent to exempt/otherwise compliant fleets
- **More operators** allocated to CARB's diesel hotline

Local outreach efforts

- Training Classes (began in 2011)
 - 33 classes with total of 956 attendees (1/1/17-present)
- One-Stop Events (one-on-one assistance, presentations, trucking industry related vendors, CHP, etc.)
 - 6 events since 2014 (4 in Alameda, 1 in Gilroy,)
 - Livermore upcoming on 8/28/19
 - Typical attendance: 100-200
- Various Local Events
 - CHP Trucker Appreciations Days
 - Presentations upon request



Incentive Programs

- Fleets must be compliant to be eligible
- Must go beyond what is required by regulations
- Cost effectiveness for diesel to diesel often limits amount of grant
- Total funding is limited
- Some programs are targeted to a turnover to near-zero and zero emission technology
- Funding types
 - Hybrid and Zero-Emission vehicle vouchers
 - Low NOx Engine incentives
 - AB 617 Funds



Truck Loan Assistance Program

- Small fleet are eligible for Truck Loan Assistance Program
 - Fleets of 10 or fewer vehicles
 - Loans to small fleets so far
 - Over 60% to fleets with 2 or fewer vehicles
 - Over 40% to fleets with 1 vehicle
 - Low interest loans
 - \$103 million from CARB and counting
 - Over 20,000 loans issued



New law means healthier communities



- Today the Regulation compliance rate is over 80%
- In 2020, DMV compliance verification will ensure a near 100% compliance
- CARB enforcement can then prioritize border crossings to further clean-up the fleet
- Full compliance allows CARB to meet PM and NOx reduction goals for rule
- **Reduction of pollutants will reduce health risks and lead to safer communities**

Resources are available

- **The TruckStop Webpage**
- Staff Resource Toolkit
- Diesel Hotline: [1-866-634-3735](tel:1-866-634-3735)
(Spanish and Punjabi assistance)
- Upcoming One-Stop Truck Events
Compliance assistance and clean technology information
 - August 28th – Livermore
 - October 15th – Red Bluff
 - December 4th – Moreno Valley



Approval of Contract for Clean Cars for All Program Case Managers



Tin Le
Staff Lead for Clean Cars For All
Technology Implementation Office

Mobile Source Committee Meeting
July 25, 2019

Benefits from Electric Vehicle (EV) Equity



For Consumers



- Benefit from fuel savings, lower maintenance, ride quality
- Improve air quality in disadvantaged communities and across the Bay Area, aligned with Assembly Bill (AB) 617

For Region & Climate



- Expand EV usage across the Bay Area, including expanded charging network
- Scale-up of EV market beyond early adopters
- Reduce demand and use of fossil fuels

Clean Cars for All Program



Low-income residents* in communities disproportionately burdened by pollution who turn in older vehicle**



Advanced Technology

- Purchase or lease
- Hybrid, plug-in, or electric vehicle



Alternative Transportation

- Clipper card
- Card for bike sharing, car-sharing, vanpooling (future option)

<http://www.baaqmd.gov/cleancarsforall>

Status of Clean Cars For All Program

(July 16, 2019)



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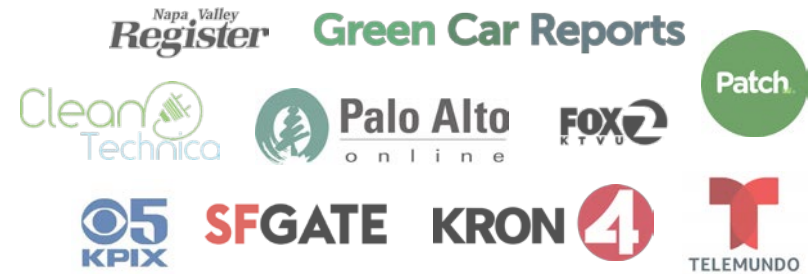
Community events organized or attended

10

Press mentions

151

Applications in progress



\$257,500

awarded



- Battery electric vehicle
- Battery electric vehicle with home charging station
- Hybrid
- Plug-in hybrid electric vehicle

New Funding Available to Expand Program



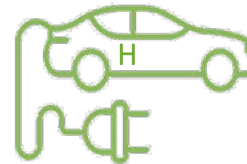
CalEnviroScreen 3.0
Communities

Hybrid



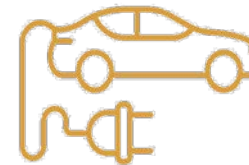
\$5,000 - \$7,000

Plug-In
Hybrid



\$5,500 - \$9,500

Battery
Electric



\$5,500 - \$9,500

Transit



\$2,500 - \$4,500

\$4.25 Million (M)
available for program
launch



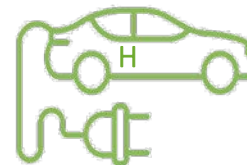
Optional

\$2,000 rebate for home charger

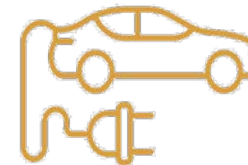
Volkswagen
Settlement
Funds

Entire
Bay Area

\$4.25M newly
available
(June 2019)



Optional



Optional

Outreach and Support for Applicants



Targeted Outreach

- Events and mailers targeting low-income residents in disadvantaged communities
- Education about vehicles, charging, recalls, battery warranties, and vehicle maintenance

Consumer Protection

- Connect applicants with organizations that offer low cost loans and credit counseling support
- Strict guidelines with dealerships who partner with the program
- Systems to protect applicant data

Transaction Assistance

- Provide support for application submission, vehicle selection, financial literacy
- Streamlined program website and application that allows applicants to track progress

Case Managers for Applicant Support



Non-profit based in Oakland providing clean energy solutions to low-income families

>10 years providing multilingual and multicultural support in the Bay Area

Leading or partnering on other Bay Area and California EV incentive and awareness programs

- Selected through Request For Proposal (RFP) #2018-004
- Current scope of work includes one-on-one assistance to applicants and organizing outreach events
- As eligibility and available funding increase, need to expand applicant support

Recommended Action



Recommend the Board of Directors:

Authorize the Executive Officer/APCO to amend the Air District's contract with GRID Alternatives to include an additional \$300,000 in funds to perform case management services for the Clean Cars for All Program as it expands to all residents of the Bay Area

Funding sources:

- Up to \$250,000 from the California Air Resources Board grant can be used for contracts to support participation of low-income consumers in disadvantaged communities
- Up to \$50,000 from grants from Federal Highway Administration and CalTrans



Thank you





Update on the 32nd International Electric Vehicles Symposium EVS32

July 25, 2019

Karen M. Schkolnick
Director, Strategic Incentives



32nd International Electric Vehicle Symposium (EVS32) -- A world of E-MOTION



May 19 – 22, 2019 at Eurexpo Convention and Exhibition Centre near Lyon, France



Accelerating Beyond Early Adopters

to achieve equitable & widespread electric vehicle use in the San Francisco Bay Area



Karen Schkolnick
Bay Area Air Quality Management District

May 21, 2019

4

Platinum Partners



GRUPE RENAULT



Gold Partners



Organized by
AVERE
HISV

Hosted by
AVERE
The European Association for Electromobility

In collaboration with
EDTA
NEA
EVAAS

Under the high patronage of





EVS32 -- A world of E-MOTION

Key Messages

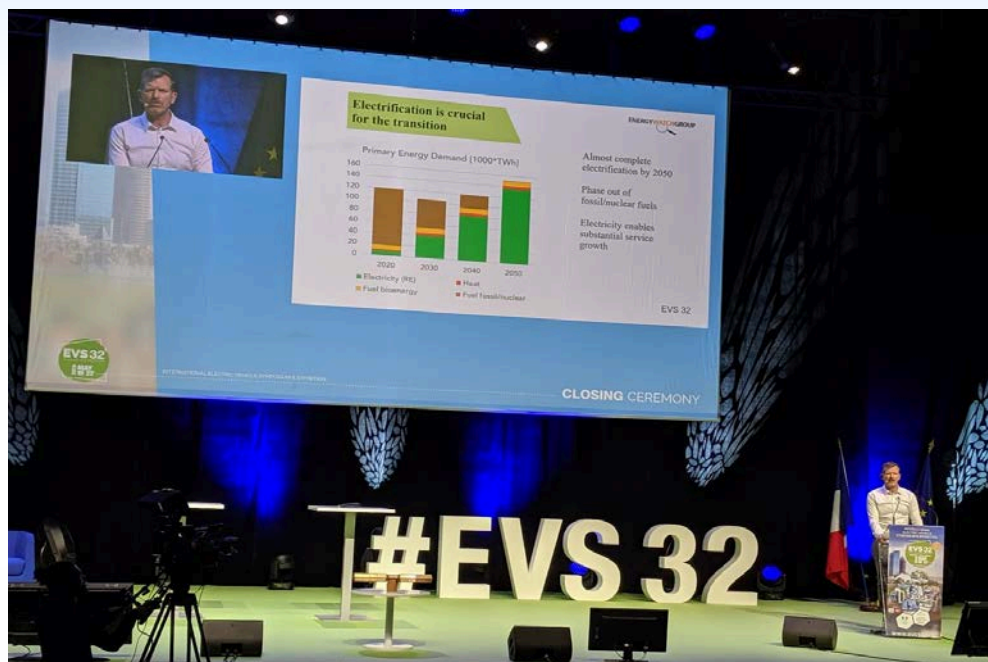
- Sustainable mobility is a core shared value
- Barriers and challenges are universal
- Information exchanges, cooperation, and partnerships are essential



Takeaway #1: EVS32

Sustainable mobility is a core shared value

Air quality and climate protection are primary drivers for e-mobility





Takeaway #1: EVS32

Sustainable mobility is a core shared value

EU LEGISLATION: STRONG PRESSURE ON CO₂ EMISSIONS

2019
Legislation 1st step:
declaration & monitoring
From 16t

2025
Legislation 2nd step:
CO₂ limit
CO₂ -15%

2030
Legislation 3rd step:
strengthened limit
CO₂ -30%

Reference year for CO₂
Unique EU CO₂ evaluation tool - VECTO
New vehicles assessed individually

CO₂ -15%
Super credit for ZEV
Penalty: €4,250 /gCO₂ /t /km /vehicle

CO₂ -30%
Super credit for ZEV
Penalty: €6,200 /gCO₂ /t /km /vehicle

ELECTRIC HEAVY DUTY TRANSPORT

#EVS32

EVS32 18%



Takeaway #2: EVS32

Barriers and challenges are universal

Pre-2010

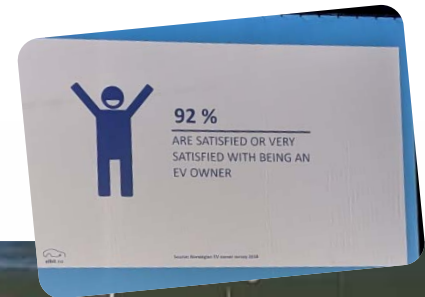
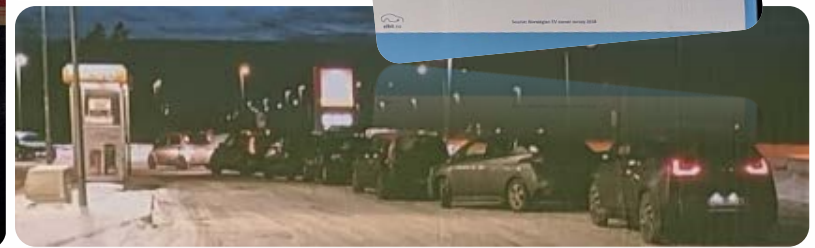
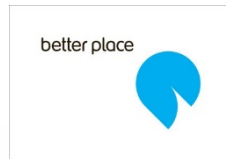
2011-2019

2020 - 2030

- lack of options and high costs of cars & infrastructure
- lack of stakeholder involvement and low consumer awareness
- limited battery range, slow charging speed, and lack of standards

- lack of cars and infrastructure
- lack of stakeholder involvement and low consumer awareness
- infrastructure network doesn't keep up with demand
- need for charging etiquette
- Nascent secondary used car market

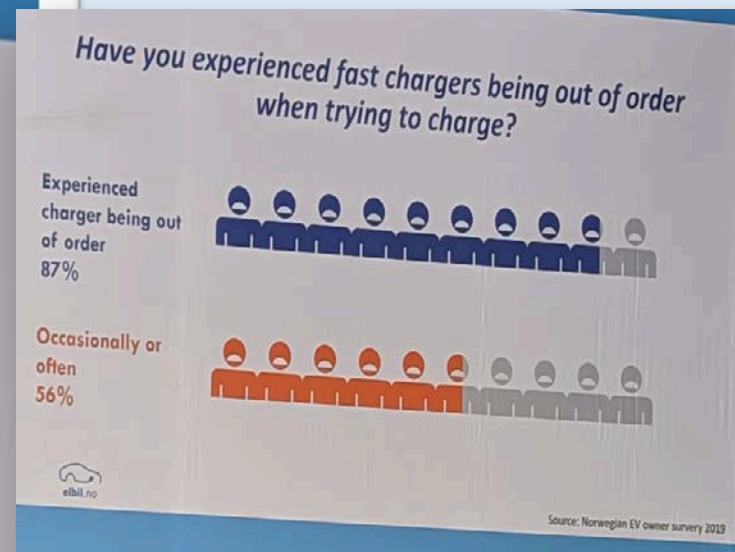
- insufficient cars and vehicles
- stranded assets & need to upgrade legacy chargers
- confusion and loss of HOV and other incentives
- constrained grid & energy supply and its reliability





Takeaway #2: EVS32

Barriers and challenges are universal





Takeaway #3: EVS32

Information exchanges, cooperation, and partnerships are essential

Consensus that E-mobility IS coming—the questions is, WHEN?

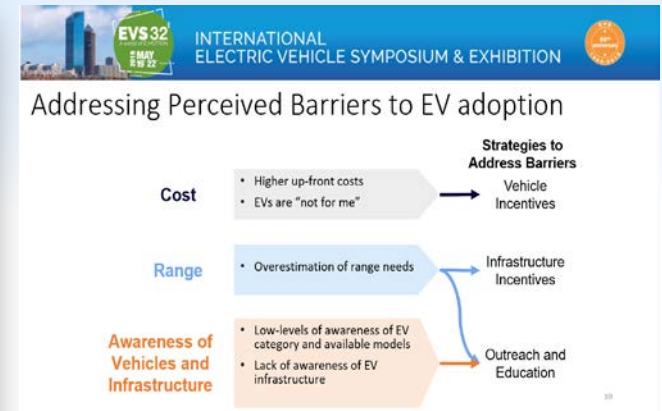
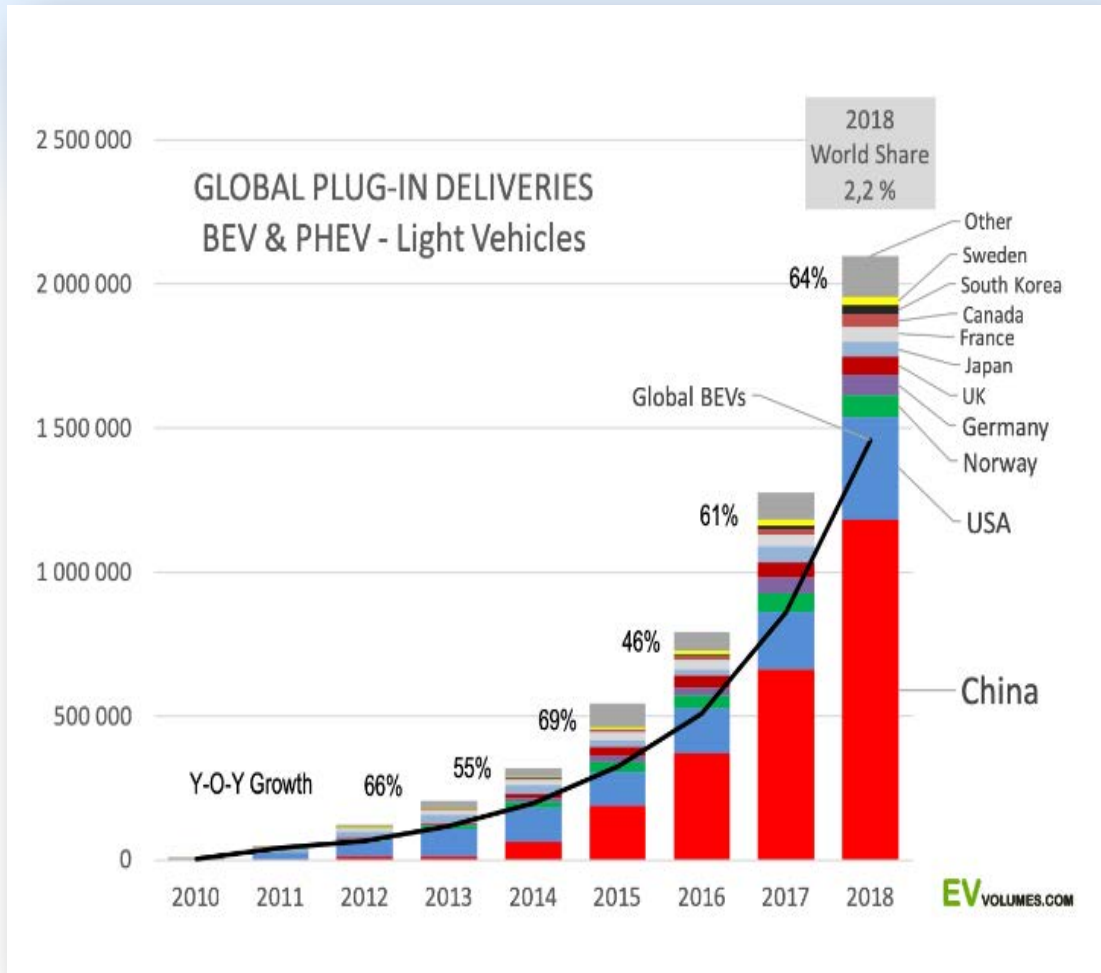


Information exchanges, cooperation, and partnerships are key to the successful adoption of EVs world-wide





If E-mobility is coming, how to accelerate the transition?



Continue efforts that support solutions to barriers and effectively address next generation issues

<http://www.ev-volumes.com/country/total-world-plug-in-vehicle-volumes/>



Beyond electric vehicles





The 33rd International Electric Vehicles Symposium & Exposition, featuring Forth Roadmap 13, will be held June 14 - 17, 2020 and hosted in the City of Portland.

