

AGENDA**ASSEMBLY BUDGET SUBCOMMITTEE No. 3
ON CLIMATE CRISIS, RESOURCES, ENERGY, AND TRANSPORTATION****ASSEMBLYMEMBER RICHARD BLOOM, CHAIR****WEDNESDAY, MARCH 16, 2022
9:30 A.M. – STATE CAPITOL, ROOM 447****NON-PRESENTATION CALENDAR**

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Public Comment

The public may attend this hearing in person or participate by phone. Any member of the public attending this hearing is strongly encouraged to wear a mask at all times while in the building location. This hearing can be viewed via live stream on the Assembly's website at <https://assembly.ca.gov/todaysevents>.

We encourage the public to provide written testimony before the hearing. Please send your written testimony to: BudgetSub3@asm.ca.gov. Please note that any written testimony submitted to the committee is considered public comment and may be read into the record or reprinted.

*A moderated telephone line will be available to assist with public participation. The public may provide comment by calling the following toll-free number: **877-692-8957 / Access Code: 131 54 47**.*

NON-PRESENTATION ITEMS

3360 CALIFORNIA ENERGY COMMISSION

ISSUE 1: FUEL CELL ELECTRIC VEHICLE FUELING INFRASTRUCTURE AND FUEL PRODUCTION: STATEWIDE ASSESSMENT (SB 643)

The Governor's budget requests \$150,000 annually from the Alternative and Renewable Fuel and Vehicle Technology Fund (Fund 3117) and 1.0 permanent position to implement the requirements of Chapter 646, Statutes of 2021 (SB 643) to prepare in consultation with the California Air Resources Board (CARB), the California Public Utilities Commission (CPUC), and other specified state agencies, a statewide assessment of the fuel cell electric vehicle (FCEV) infrastructure, fuel production, and distribution needed to meet California's zero-emission truck, bus, and off-road vehicle goals as set in Executive Order N-79-20, as well as any CARB regulation that requires or allows zero-emission heavy-duty and off-road vehicles.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 2: IMPLEMENTATION OF CHARGING INFRASTRUCTURE WORKFORCE ANALYSIS (SB 589)

The Governor's budget requests \$113,000 annually from the Alternative and Renewable Fuel and Vehicle Technology Fund (Fund 3117) and 0.8 permanent position to implement the requirements of Chapter 732, Statutes of 2021 (SB 589). The additional resources will assess workforce and resource needs associated with electric vehicle charging infrastructure deployment goals.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

3900 CALIFORNIA AIR RESOURCES BOARD

ISSUE 3: CEMENT SECTOR GREENHOUSE GAS REDUCTIONS: NET-ZERO EMISSIONS STRATEGY (SB 596)

The Governor's budget requests \$725,000 Cost of Implementation Account (COIA) and 2.0 permanent positions in 2022-23 and \$423,000 COIA in 2023-24 and ongoing to develop and implement a comprehensive strategy to achieve net-zero emissions of greenhouse gas emissions associated with cement use within the state by 2045, as required by Chapter 246, Statutes of 2021 [Senate Bill (SB) 596].

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 4: HEAVY-DUTY VEHICLE INSPECTION AND MAINTENANCE PROGRAM PER SENATE BILL (SB) 210

The Governor's budget requests \$7,624,000 Air Pollution Control Fund (APCF) and 10.0 permanent positions in 2022-23 in order to effectively implement and enforce the Heavy-Duty Vehicle Inspection and Maintenance (HD I/M) program. This includes \$6,000,000 in contract funding to support initial program implementation needs.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 5: IMPLEMENTATION OF GREENHOUSE GAS REDUCTION FUND: CALIFORNIA JOBS PLAN ACT (AB 680)

The Governor's budget requests \$399,000 from the Greenhouse Gas Reduction Fund (GGRF) and 2.0 permanent positions in 2022-23 and ongoing to meet the statutory requirements of Chapter 746, Statutes of 2021 [Assembly Bill (AB) 680]. This bill requires CARB to work with the Labor and Workforce Development Agency to update its California Climate Investments Funding Guidelines by July 1, 2025 to include several workforce standards for certain programs that receive continuous appropriations from GGRF. In addition to helping GGRF-funded programs implement these guidelines and assisting applicants with meeting these standards, these positions will develop and support administering agencies' use of tools and processes that will allow these programs to report the benefits produced by these new workforce standards.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 6: LABOR STANDARDS FOR SHORT-HAUL AND DRAYAGE TRUCKING FLEETS (AB 794)

The Governor's budget requests \$1,154,000 in General Fund and 6.0 permanent positions in Fiscal Year (FY) 2022-23 and \$2,300,000 General Fund and 6.0 additional (12.0 total) permanent positions in FY 2023-24 and ongoing to implement Chapter 748, Statutes of 2021 [Assembly Bill (AB) 794], which requires CARB to implement labor standards for short-haul and drayage trucking fleets participating in applicable incentive programs, as specified. This request will provide CARB with the resources needed to develop and implement new processes for applicable program eligibility, develop expertise in applicable labor laws, investigate third party reporting of labor standard violations, and carry out enforcement.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 7: MEDIUM- AND HEAVY-DUTY ZERO-EMISSION VEHICLE FLEET PURCHASING ASSISTANCE PROGRAM (SB 372)

The Governor's budget requests \$211,000 of Air Quality Improvement Fund (AQIF) and 1.0 permanent position to implement the Medium- and Heavy-Duty Zero-Emission Vehicle Fleet Purchasing Assistance Program pursuant to Chapter 639, Statutes of 2021 [Senate Bill (SB) 372]. This statute directs CARB to develop and administer a program with the California Pollution Control Financing Authority to make financing tools and non-financial supports available to the operators of medium- and heavy-duty vehicle fleets in order to fully enable those operators to transition their fleets to zero-emission vehicles.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 8: NEW CLEAN AIR REPORTING LOG APPLICATION DEVELOPMENT

The Governor's budget requests 2.0 permanent positions to support the implementation and maintenance of the Clean Air Reporting Log (CARL) application. Costs for the CARL application and associated staffing are funded through an existing Carl Moyer Local Assistance program appropriation.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 9: OPERATIONALIZING RACIAL EQUITY WITHIN CALIFORNIA AIR RESOURCES BOARD PROGRAMS, PLANS, AND PRACTICES

The Governor's budget requests \$1,847,000 Air Pollution Control Fund (APCF), 4.0 permanent positions in Fiscal Year (FY) 2022-23, and \$1,843,000 APCF ongoing to advance racial equity efforts, with an initial focus on research, incentive programs, regulations, air quality planning, and climate change.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 10: SOUTHERN CALIFORNIA HEADQUARTERS BUILDING MANAGEMENT AND LABORATORY SUPPORT

The Governor's budget requests \$3,313,000 Air Pollution Control Fund in 2022-23, \$3,333,000 in 2023-24, \$3,434,000 in 2024-25, \$1,145,000 in 2025-26, and \$685,000 and 5.0 permanent positions in 2026-27 and ongoing to address increased workload at the new Southern Headquarters. This includes a total of \$8,480,000 in contract funding over several years to renew the current Southern HQ building management contract through 2025-26.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 11: STATEWIDE ASSESSMENT FOR FUEL CELL ELECTRIC VEHICLE FUELING INFRASTRUCTURE AND FUEL PRODUCTION (SB 643)

The Governor's budget requests \$211,000 Greenhouse Gas Reduction Fund (GGRF) and 1.0 permanent position to implement Chapter 646, Statutes of 2021 [Senate Bill (SB) 643]. The requested position would perform the new duties associated with the requirements in SB 643 that enlist CARB's experience and expertise with medium- and heavy-duty vehicles and fleet regulations.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ISSUE 12: UTILIZING METHANE SATELLITE DATA

The Governor's budget requests \$666,000 Cost of Implementation Account (COIA) and 2.0 permanent positions in 2022-23 and \$516,000 in 2023-24 and ongoing to operationalize the use of remote sensing data from two satellites that California will launch jointly with Planet Inc, JPL, and several philanthropic donors. This Carbon Mapper program utilizes satellites that will pinpoint individual leaks of methane from space, and CARB must develop the capacity and internal infrastructure to host a public data portal, conduct the needed data analysis, and evaluate mitigation options using the satellite data that will be available after the satellites are launched in 2023.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

3900 CALIFORNIA AIR RESOURCES BOARD
0540 CALIFORNIA NATURAL RESOURCES AGENCY
8570 DEPARTMENT OF FOOD AND AGRICULTURE

ISSUE 13: CALIFORNIA CARBON SEQUESTRATION AND CLIMATE RESILIENCY PROJECT REGISTRY (SB 27)

The Governor's budget requests one-time and ongoing expenses, plus permanent positions from various fund sources to implement SB 27. Those costs are outlined below:

CNRA requests \$750,000 (one-time) and \$285,000 (ongoing) General Fund to implement Senate Bill 27 (Chapter 237, Statutes of 2021). SB 27 requires CNRA to, no later than July 1, 2023, establish and maintain the California Carbon Sequestration and Climate Resiliency Project Registry for the purposes of identifying and listing projects in the state that drive climate action on the state's natural and working lands and are seeking funding from state agencies or private entities. The bill requires CNRA to consider the environmental and public health impacts of any direct air capture project before adding the project to the registry. CNRA will create a process for listing projects on the registry and is required to track and report realized climate benefits of projects funded through the registry.

CARB requests 2.0 permanent positions and \$425,000 Cost of Implementation Account (COIA) in 2022-23, \$1,923,000 (including \$1,500,000 in one-time contract funds) in 2023-24, and \$423,000 in 2024- 25 and ongoing to incorporate the Natural and Working Lands Climate Smart Strategy in the Scoping Plan and implement CARB's responsibilities to support the Natural and Working Lands Registry of Projects as requested by SB 27. The bill requires CARB to establish carbon dioxide removal targets for 2030 and beyond as part of the Scoping Plan process, and to take the Natural and Working Lands Climate Smart Strategy, science-based data, cost-effectiveness, and technological feasibility into consideration when setting these targets.

CDFA requests \$125,000 General Fund and 1.0 permanent position in 2023-24 and ongoing to implement the functions required by SB 27. The bill requires CDFA to collaborate with CNRA to develop an application process for applicants whose projects are listed in the Carbon Sequestration and Climate Resiliency Project Registry and support applicants' ongoing participation in the registry.

Staff Recommendation: Absent member questions or input from the public at this hearing, Staff recommends this item be considered for a vote-only calendar when the Committee takes action.

ITEMS TO BE HEARD

VARIOUS

ISSUE 1: ZERO EMISSION VEHICLE PACKAGE

The Governor's budget requests \$6.1 billion (\$3.5 billion General Fund and \$2.6 billion various other funds) in new zero-emission transportation investments over four years to increase access to clean transportation, reduce air pollution, and support disadvantaged and low-income communities, including tribal communities. Of these investments, \$4.2 billion will go to the California Air Resources Board and the California Energy Commission to more than double the funding targeted for heavy duty zero-emission technology advancement, to expand investments in passenger vehicle incentives and infrastructure, and, ultimately, to amplify the key priorities identified in the 2021 Budget Act: delivering both equity and scale.

PANEL

The following individuals will participate virtually in the discussion of this issue:

- Craig Segall, Deputy Executive Officer, Air Resources Board
- Hannon Rasool, Deputy Director, Fuels and Transportation Division, California Energy Commission
- Sergio Aguilar, Assistant Program Budget Manager, Finance
- Ross Brown, Principal Fiscal & Policy Analyst, Legislative Analyst's Office

BACKGROUND

This proposal includes \$1.5 Billion in Proposition 98 funds for zero emission school buses, which would be administered by the California Department of Education. This item was heard in the Assembly Budget Subcommittee No. 2 on Education Finance on February 22, 2022 and will be voted on there.

Last year's budget included a three year, \$3.9 billion Zero Emission Vehicle (ZEV) package. This proposal would increase the total amount to \$10 billion over five years. This new proposal includes:

California Department of Education (CDE)

- \$1.5 billion Prop. 98 to fund zero emission school buses.

California State Transportation Agency (CalSTA)

- \$383 million federal funds to CalSTA for ZEV infrastructure along transportation corridors (freeways).

California Air Resources Board (CARB)

- \$256 million (\$180 million General Fund and \$76 million GGRF) for low income customers to purchase ZEVs.
 - The specific program allocations would be decided by an annual public stakeholder process (unless the Legislature specifies the suballocations), but would likely include funding for the Clean Cars for All program, Financing Assistance Program or CVAP (Clean Vehicle Assistance Program), or potentially adding funding to the low income portion of CVRP (Clean Vehicle Rebate Project).
 - The Clean Cars for All Program provides low income customers the ability to retire cars over 15 years old for \$1,500 and/or replace it for up to \$9,500 in incentives for a new or used ZEV, transit pass, or bike. It is stackable with CVRP. This program is currently only in specific air districts, but will be administered statewide shortly.
 - The CVAP program provides low income customers up to \$5,000 for a new or used ZEV. It also includes “low” interest loans (capped at 8%), as well as chargers or fuel cards.
 - This funding seeks to help 100,000 low-income families transition to ZEVs.
- \$419 million General Fund for Zero Emission Mobility.
 - This funding will support sustainable community-based transportation equity projects that expand clean transportation options and thereby reduce vehicle miles traveled and increase access to zero-emission mobility in low-income communities. These locally driven projects continue to be a direct response to critical mobility needs identified by community-based organizations and residents working on the front lines to lift up priority populations and build on the vision advanced in the Climate Action Plan for Transportation Investments (CAPTI). This includes legacy projects like: Clean Mobility Options (CMO), the Sustainable Transportation and Equity Project (STEP), Clean Mobility in Schools (CMiS), and the projects that provide planning and support. With this four-year proposal, pending public process, CARB may also consider building a pilot program to incentivize and reward transportation agencies for re-prioritizing VMT increasing roadway expansion projects to instead focus on expanding transportation choices that reduce VMT in line with the state’s climate and equity goals. Eligible projects could include transit, active transportation, micro mobility services, car sharing, van pooling, and other innovative investments that reduce dependence on driving. This aims to support 100 community-based projects.
- \$545 million General Fund to deploy 1,000 drayage trucks and 1,600 transit buses.
- \$600 million Greenhouse Gas Reduction Fund (GGRF) for medium and heavy duty ZEV incentives through HVIP/CORE.
 - Grants for zero-emission clean trucks, buses, and off-road equipment across a range of vehicle classes including construction and agriculture.
 - HVIP is the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project.
 - CORE is the Clean Off-Road Equipment Voucher Incentive Program.

California Energy Commission (CEC)

- \$600 million General Fund for EV Charging Infrastructure.
 - This will likely cover 5,000 direct current fast chargers (DCFC)s with increased capacity up to 300 kW or higher. This would include co-sited energy storage or other measures to mitigate grid upgrade costs, integrate load, and add to grid resiliency. This investment will help meet the projected need of approximately 15,000 DCFC by 2025 and 40,000 DCFC by 2030, according to the CEC's analysis pursuant to Assembly Bill 2127.
- \$300 million General Fund for Equitable At-Home Charging Incentives.
 - This will deploy charging options to support those living in multi-unit dwellings such as apartments and condos and at low-income or disadvantaged communities' single-family homes. The at-home investments will fund Level 2 charging stations and also support infrastructure such as panel upgrades so that a broader number of Californians can enjoy the convenience and cost savings of charging their vehicle at home. This will support approximately 2,000 multi-unit dwelling locations, providing about 28,000 new Level 2 chargers that can be used by multiple residents at these locations. Further, the low-income and disadvantaged community single-family home investments will support an additional 50,000 homes.
- \$390 million General Fund to deploy infrastructure to support 1,000 drayage trucks and 1,600 transit buses.
- \$500 million in General Fund for infrastructure for ZEV trucks, buses, and off-road equipment.

CARB and CEC

- \$200 million General Fund for Emerging Opportunities.
 - This will fund demonstration and pilot projects in high carbon sectors, such as maritime, aviation, locomotion, and off-road applications, as well as support vehicle grid integration at scale.
- \$400 million General Fund for Port Electrification.
 - This will support both hydrogen fuel cells and battery powered vehicles and equipment and their related infrastructure.

LAO COMMENTS

Background

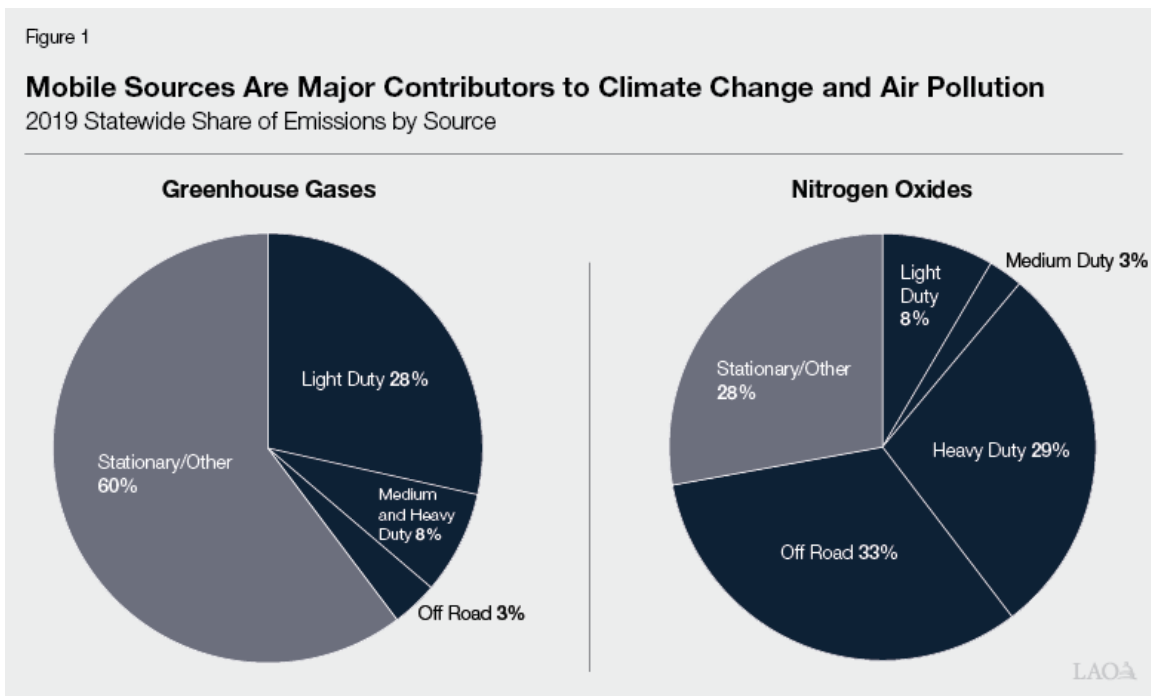
State Has Ambitious Climate Change and Air Quality Goals. California has a variety of goals related to reducing greenhouse gas (GHG) emissions, as well as regional and local air pollution. For example:

- **GHG Limit.** Chapter 249 of 2016 (SB 32, Pavley) established a statewide GHG limit of 40 percent below 1990 levels by 2030. (The Governor also has an executive order

establishing a goal of statewide carbon neutrality by 2045, but this target is not in state law.)

- Federal Air Quality Standards.** California has two areas with the most critical air quality challenges in the nation—the South Coast Air Basin and the San Joaquin Valley. Substantial reductions in criteria pollutants from all sources—specifically, nitrous oxides (NOx) and fine particulate matter (PM2.5)—are needed to meet increasingly stringent federal air quality standards in the coming years.

Mobile sources represent a substantial share of California’s GHGs and air pollution. In particular, these sources represent about 40 percent of GHGs and over 70 percent of statewide NOx emissions. (This does not include “upstream” GHG emissions, such as emissions related to producing or refining crude oil.) Light-duty vehicles make up the largest share of mobile source GHG emissions, while heavy-duty vehicles and off-road equipment make up the majority of mobile source NOx. Heavy-duty vehicles and off-road equipment are also primary sources of diesel particulate matter, which the California Air Resources Board (CARB) estimates is the source of 70 percent of total known cancer risk related to air toxics in California.



Proposal

Governor Proposes Additional \$6.1 Billion for ZEV-Related Activities. The Governor proposes a total of \$6.1 billion from various fund sources (General Fund, Greenhouse Gas Reduction Fund [GGRF], and federal funds) over five years for a package of proposals related to ZEVs. In 2022-23, most of the proposed \$2.7 billion is for school buses (\$1.5 billion), and heavy-duty vehicle and infrastructure incentives (\$700 million).

Summary of Approved and Proposed ZEV Packages

General Fund, Unless Noted Otherwise (In Millions)

Program	Department	2021-22 Package	Proposed 2022-23 Package				Total
		Total	2022-23	2023-24	2024-25	2025-26	
Light-Duty Vehicles							
Clean Vehicle Rebate Project	CARB	\$525	—	—	—	—	—
Clean Cars 4 All and Other Equity Projects	CARB	400	\$171 ^a	\$50	\$35	—	\$256
Transportation Equity, Mobility, and SCS Pilots	CARB, CalSTA	—	65	130	134	\$90	419
ZEV Fueling Infrastructure Grants	CEC	300	100	220	210	70	600
Equitable At-Home Charging	CEC	—	60	100	90	50	300
Transportation Package ZEV ^b	CalSTA	407	77	77	77	76	383 ^c
Heavy-Duty and Off-Road Vehicles							
Drayage Trucks & Infrastructure	CARB, CEC	\$535	—	\$200	\$170	\$105	\$475
Transit Buses and Infrastructure	CARB, CEC	290	—	200	160	100	460
School Buses and Infrastructure	CARB, CEC, CDE	450	\$1,500	—	—	—	1,500
Clean Trucks, Buses, and	CARB, CEC	700	700 ^d	200	165	35	1,100

Off-Road Equipment							
Ports	CARB, CEC	—	—	100	200	100	400
Near-Zero Heavy-Duty Trucks	CARB	45	—	—	—	—	—
Emerging Opportunities	CARB, CEC	—	20	50	86	44	200
Other							
ZEV Consumer Awareness	GO-Biz	\$5	—	—	—	—	—
ZEV Manufacturing Grants	CEC	250	—	—	—	—	—
Totals		\$3,907	\$2,693	\$1,327	\$1,327	\$746	\$6,093

Mostly Expands Existing Programs, but Creates Some New Programs. Most of the proposed funding would continue and/or expand existing programs, such as heavy-duty and off-road programs, ZEV fueling infrastructure programs, and programs focused on cleaner vehicles and mobility for low-income households and disadvantaged communities (also known as transportation equity programs). The most significant new programs and programmatic changes proposed by the Governor include:

- **School Bus Program (\$1.5 Billion Proposition 98 General Fund).** This program would provide competitive grants to school districts to replace nonelectric school buses with electric buses and purchase related infrastructure.
- **ZEV Fueling Infrastructure Grants (\$600 Million General Fund).** The proposal includes a total of \$600 million over four years—with \$100 million in 2022-23—for electric vehicle (EV) charging infrastructure. Unlike last year’s ZEV package, this proposal would prioritize fast chargers.
- **Federal Funding for ZEV Infrastructure (\$383 Million Federal Funds).** The proposal includes federal funding available to California through the federal Infrastructure Investment and Jobs Act (IIJA) enacted in November 2021. Specifically, it includes \$383 million for five years from the National Electric Vehicle Infrastructure Formula Program, which is intended to support fueling infrastructure along designated alternative fuel corridors, such as along the Interstate Highway System.
- **Equitable At-Home Charging (\$300 Million General Fund).** The proposal includes a total of \$300 million over four years—with \$60 million in 2022-23—for EV charging infrastructure at multi-unit dwellings and low-income, single-family homes. The funds

would be used for Level 2 charging stations and electrical panel upgrades. (Level 2 charging stations provide about 14-35 miles of driving range per hour of charging.)

- Potential Sustainable Communities Strategies (SCS) Pilots.** As part of the proposed funding for SCS pilots and other equity programs, CARB would consider creating a new pilot program that would incentivize transportation agencies to prioritize projects that reduce vehicle miles traveled (VMT), rather than roadway expansion projects. The proposed budget does not provide funding explicitly for this pilot project, but CARB would consider it as part of its typical Low Carbon Transportation Investment Plan process after the budget is adopted.

Assessment

Package Funds Different Types of Vehicles and Prioritizes Heavy-Duty ZEVs

Funding Expected to Support a Variety of Vehicle Types and Fueling Infrastructure. The proposed funding would support a variety of vehicles, EV charging stations, off-road equipment, and other projects. The estimated amounts are subject to uncertainty because: (1) the final allocations will depend on decisions made by departments about how to allocate the funding to specific subprograms or projects; and, (2) actual deployment amounts could also depend on which technologies are actually purchased. For example, the number of vehicles supported through the clean truck and bus vouchers depends on which technologies businesses and governments ultimately choose to purchase with the vouchers.

Two-Thirds of New Funding for Heavy-Duty Vehicle Programs. Over two-thirds of the proposed funding would support heavy-duty vehicle programs. (This includes the \$1.5 billion for electric school buses.) A majority of the funding in the 2021-22 ZEV package was also targeted at such programs. Under the Governor’s plan, about 62 percent of the combined \$10 billion total from both ZEV packages would go to heavy-duty vehicle programs. Funding for light-duty vehicles would be targeted to transportation equity and mobility programs, as well as fueling infrastructure. No new funding would be allocated to the state’s main ZEV rebate program, the Clean Vehicle Rebate Project (CVRP). We note that the \$525 million allocated to CVRP in the 2021-22 budget was intended to cover three years of funding for the main CVRP program.

Estimated Number of Vehicles, Chargers, and Projects Supported With Proposed Funding (In Millions)

Program	Amount	Estimated Deployment
Light-Duty		
ZEV Fueling Infrastructure	\$600	5,000 DC fast chargers
Transportation Equity, Mobility, and SCS Pilots	419	100 projects ^a
Equitable At-Home Charging	300	28,000 Level 2 MUD chargers; 50,000 home chargers

Vehicle Rebates for Low-Income Consumers	100	20,400 vehicles
Financing Assistance for Low-Income Consumers	80	12,300 vehicles
Clean Cars 4 All	76	6,600 vehicles

Heavy-Duty and Off-Road

Clean Trucks, Buses, and Off-Road Equipment	\$600	4,100 vehicles and equipment
Transit Buses and Infrastructure	320	1,600 buses
Ports	250	860 pieces of off-road equipment
Drayage Trucks and Infrastructure	225	1,000 trucks
Emerging Opportunities	100	10 projects ^a

^a Each project may fund multiple vehicles and equipment.

Source: California Air Resources Board and Energy Commission.

SCS = Sustainable Communities Strategies; ZEV = zero-emission vehicle; and MUD = multi-unit dwellings.

New Programs Raise Several Key Implementation Questions

Some of the funding proposed by the Governor would go to new programs where key program design and implementation details are unclear. Below, we identify several questions about the implementation of two new programs—the Equitable At-Home Charging program and the potential SCS pilots.

Equitable At-Home Charging Program. At the time of this brief, the Administration has not provided information on some of the key design features for this program. This includes:

- How is this program different from other efforts to fund EV charging infrastructure for low- and moderate-income households? Currently, the state, local air districts, and utilities administer programs that offer financial incentives for charging infrastructure, including infrastructure for multifamily dwellings and single-family households. For example, the Clean Cars 4 All program in the South Coast offers low- and moderate-income households financial support for home EV charging infrastructure.
- What is the program outreach strategy? For example, will incentives for charging infrastructure be provided at the car dealership upon purchase of the ZEV, or will households access this program in some other way?
- How will this program target renters? Low-income households are more likely to rent their homes. As a result, an effective infrastructure program targeted at low-income households will likely need to focus on rental properties.

Potential SCS Pilots. The Administration might use some of the funding for transportation equity programs to pilot SCS intended to reduce VMT. We find that piloting potential strategies to reduce VMT could have merit, especially given the lack of progress the state has made in this policy area over the past several years. However, there are very few details about how these pilots would be structured and how they would be different from other state programs targeted at reducing VMT, such as the Active Transportation Program administered by the California Department of Transportation (Caltrans) and the Clean Mobility Options program administered by CARB.

Plan for Complementing Federal ZEV Infrastructure Funding Unclear

The federal IIJA established three main ZEV infrastructure programs. Funding for one of the programs—\$383 million to Caltrans through the National Electric Vehicle Infrastructure Formula Program—is already part of the Governor’s proposed budget. According to recently released federal guidance, the state must submit a plan to the federal government describing how funding will be used. At the time this brief was written, the Administration has not provided detail on how the \$383 million will be used. The other two charging and fueling infrastructure grant programs are competitive programs and detailed federal guidance is not yet available. For all programs, the federal government will only pay for a portion of the costs, with the remainder coming from other private or public sources.

Major ZEV Infrastructure Funding in IIJA (In Millions)

Federal Program	Description	Total Funding 2022-26	Award Type	Total California Funding
National Electric Vehicle Infrastructure Formula Program	Install EV charging infrastructure along designated alternative fuel corridors, such as highways.	\$5,000	Formula	\$383
Charging and Fueling Infrastructure Grants (Community Charging)	Install public EV charging and alternative fuel on public roads, schools, parks, and publicly accessible parking facilities. Priority given to rural and low- and moderate-income neighborhoods, and communities with more multi-unit dwellings.	1,250	Competitive	N/A
Charging and Fueling Infrastructure	Install EV charging and alternative fueling infrastructure along designated alternative	1,250	Competitive	N/A

Grants (Corridor Charging) fuel corridors and in communities.

Given the limited detail, it is unclear how the proposed state funding for ZEV infrastructure—ZEV infrastructure grants and Equitable At-Home Charging—will be used to best complement federal funding. For example, will any state funding be needed to leverage federal funding? How do these state funding proposals help fill key gaps in federal funding?

Multiyear Funding Approach Presents Trade-Offs

Multiyear Funding Can Be Helpful for Market Certainty and Program Administration. The Governor’s proposal includes \$3.4 billion in new out-year funding commitments—mostly from the General Fund. Multiyear funding commitments can have programmatic benefits. First, for programs that aim to advance newer technologies, a long-term funding commitment can help provide a market signal to businesses making long-term investment decisions. For example, a long-term state funding commitment to heavy-duty ZEV programs could provide greater certainty to businesses or government that are deciding whether to shift their vehicle fleet to ZEVs. Second, long-term funding can help state and local agencies design programs. For example, it could help CARB make program design decisions (such as rebate levels and eligible technologies) that help avoid the need to implement waitlists.

...But Reduces Legislative Oversight and Creates Future General Fund Pressures. Multiyear funding comes with some potential downsides too. First, since funding would be built into the “base” budget, the Administration would not submit budget change proposals for this spending in future years. This could reduce future legislative oversight by eliminating a process that is often used to assess program implementation and outcomes prior to committing additional funding. One potential solution to this would be to require the Administration to report annually on the progress of how funding has been spent, key outcomes, key challenges, and plans for spending in future years. Second, multiyear funding commitments can create out-year General Fund pressure, which could limit the Legislature’s ability to fund other priorities in future years.

STAFF COMMENTS

To better understand these proposals, this Subcommittee may wish to ask:

- Can each department provide us with an implementation update of last year’s funding?

CEC

- What is the status of reaching the 100 hydrogen station goal by 2024 established by AB 8 (Perea, 2013)? How many hydrogen vehicles do manufacturers expect to have on the road and will these stations be able to support them?
- How are you ensuring the reliability of existing and future state funded infrastructure?

CARB

- What is the long term vision for the medium and heavy duty ZEV market and California incentive dollars?

- Is CARB's goal to be technology neutral with the incentive funding? If so, how does CARB ensure that funding for medium- and heavy- duty vehicles is technology neutral?
- How will you ensure these dollars are funding/replacing the most high mileage or oldest/most emitting vehicles on the road to most effectively reduce emissions per dollar?
- How do you plan to communicate future program changes, implantation status, and market dynamics with the Legislature if we provide four year funding up front?

To further clarify these programs this Subcommittee may wish to:

- Carveout at least \$10 million of the \$256 million for low income customer ZEV incentives to fund battery replacements to reduce hesitancy of purchasing used EVs, pursuant to AB 193 (Cervantes, 2018) and provide an extended encumbrance period.
- Adopt trailer bill language prohibiting the port electrification dollars from funding port automation, as the budget has previously prohibited state funds for this purpose in the past.
- Consider adopting tenant protections for the renters benefiting from the CEC's equitable charging program, similar to those used by the Low Income Weatherization Program.
- Consider efforts to increase public knowledge of these consumer facing programs like the CVRP and Clean Cars for All. Staff recommends that the Department of Motor Vehicles include summaries of government programs that subsidize clean vehicles in annual car registration notices.
- As the LAO notes, adopting multi-year spending plans has the potential to reduce legislative oversight. To address these concerns and well as keep the Legislature informed of programmatic changes and market developments, this subcommittee may wish to adopt trailer bill language with reporting requirements and ensure annual briefings for legislative staff on the annual funding plan when it is proposed for adoption by the Board in the fall.

Staff Recommendation: Hold Open.

3900 CALIFORNIA AIR RESOURCES BOARD

ISSUE 2: 2022 CAP AND TRADE EXPENDITURE PLAN: COMMUNITY AIR PROTECTION PROGRAM, LOCAL AIR DISTRICT IMPLEMENTATION, AND TECHNICAL ASSISTANCE TO COMMUNITY GROUPS

The Governor's budget requests \$240,000,000 Greenhouse Gas Reduction Fund (GGRF) for Community Air Protection Incentives, Air District implementation, and Community Air Grants to meet the statutory requirements of Chapter 136, Statutes of 2017 (AB 617).

This \$240 million includes:

- \$180 million will be for incentives to reduce both stationary and mobile source emissions.
- \$50 million will be provided for local air districts' implementation of the Program, including establishing and coordinating community steering committees, emissions reduction program development, deployment of air monitoring within communities, and implementation of Best Available Retrofit Control Technologies (BARCT) requirements.
- \$10 million will be for technical assistance and capacity building grants to community-based organizations to support and participate in the AB 617 process, including for involvement in and support of the development of community emission reduction plans.

PANEL

The following individuals will participate virtually in the discussion of this issue:

- Chanell Fletcher, Deputy Executive Officer, Air Resources Board
- Sergio Aguilar, Assistant Program Budget Manager, Finance
- Ross Brown, Principal Fiscal & Policy Analyst, Legislative Analyst's Office

BACKGROUND

California's regional air pollution reduction efforts have yielded significant benefits over the past 50 years. However, these air quality and health improvements are not shared equitably by all. Nearly one third of Californians, predominantly people of color, live in the over 400 California communities that have disproportionately dirty air. Someone living in one of these communities, on average, breathes air with twice the amount of cancer-causing diesel particles than someone that lives in a more affluent, cleaner community. This air pollution burden is the result of a long history of racial injustice, environmental racism, poverty, and disinvestment.

The Community Air Protection Program (Program), created to implement the provisions of Chapter 136, Statutes of 2017 (AB 617), seeks to address this disparity. The work of the Office of Community Air Protection includes:

1. Development and ongoing revisions of the statewide strategy (Community Air Protection Blueprint) to reduce community pollution burdens (mandated by AB 617).
2. Assessment and selection of communities to be part of the program (mandated by AB 617).

3. The development of a Technology Clearinghouse and the evaluation of emissions control technology (mandated by AB 617).
4. Development of Community Emissions Reduction Programs (CERP) and Community Air Monitoring Plans (mandated by AB 617).

There are 17 communities formally selected and included in the program either implementing adopted Community Emissions Reduction Programs (CERP) and monitoring plans or actively developing CERPs and monitoring plans. This is a small fraction of the number of overburdened communities that qualify under the provisions of AB 617. New communities are considered annually in February. This year two were added: East Oakland and San Pedro. According to CARB, two of the three largest Air Districts have cited limited implementation funding as the reason for declining to nominate additional communities. Additionally, according to CARB, Imperial County revoked an application due to lack of implementation funding.

In addition to the large number of communities statewide, AB 617 requires CARB staff to perform intensive engagement and outreach in each community. To implement the program and develop the CERPs, AB 617 requires CARB and the local air districts to consult with individuals, community-based organizations, and environmental justice organizations, in addition to other stakeholders such as affected businesses and industries and local governmental bodies. Respecting and tapping into locals' expertise in what is happening in their communities is key to finding necessary solutions.

STAFF COMMENTS

\$320 million was allocated for these three programs in 2021-2022, \$50 million in 2020-2021 due to limited GGRF, \$275 million in 2019.

The Governor's proposed funding represents a 25 cut from last year's funding and a 13% cut from 2019 funding, despite the growth in communities developing monitoring and emission reduction plans under AB 617 and the many heavily impacted communities that are eligible in the future.

This cut is despite CARB's own budget documents stating that "two of the three largest Air Districts have cited limited implementation funding as the reason for declining to nominate additional communities this year for CARB's Board to consider in the selection process."

When California is investing significant resources in addressing climate change and air quality with multi-year investments, this budget proposes to cut dollars targeted at cleaning up the most polluted and disadvantaged communities. We should be using funds to expand the number of AB 617 communities, not starve them.

Staff recommends increasing the funding for all three of these programs to ensure new communities can participate.

Staff Recommendation: Hold Open.

ISSUE 3: CENTRALIZING AND EXPANDING COMMUNITY MONITORING

The Governor's Budget requests \$30,000,000 Greenhouse Gas Reduction Fund (GGRF) to deploy new, mobile Community Air Monitoring data collection and visualization approaches over a limited term to build on and complement existing CARB stationary air monitoring and data visualization tools. Limited-term hyper-local and real-time mobile pollution monitoring will provide a snapshot of information to increase understanding of current community exposure to the pollutants measured across the state and facilitate focused community and agency action, including prioritizing locations for and establishment of community-scale pollution monitoring in the future.

PANEL

The following individuals will participate virtually in the discussion of this issue:

- Edie Chang, Deputy Executive Officer, Air Resources Board
- Sergio Aguilar, Assistant Program Budget Manager, Finance
- Ross Brown, Principal Fiscal & Policy Analyst, Legislative Analyst's Office

BACKGROUND

CARB and local air districts operate and maintain an extensive air monitoring network, as prescribed by the Code of Federal Regulations, which produces very accurate and extensive data used to determine regional compliance throughout the state with National Ambient Air Quality Standards (NAAQS). The data are both scientifically and legally defensible for this purpose and focus on federal criteria pollutants (pollutants for which NAAQS exist).

Although not required by federal regulation, CARB and local air districts also monitor for toxic air contaminants (TACs) and greenhouse gases (GHGs) at a limited number of locations for the purpose of assessing health risks, evaluating emissions, and determining efficacy of state and local control measures. The limited number of locations is largely due to deployment and equipment costs associated with monitoring TACs. Over the last 40 years, TAC emissions have been reduced, both regionally and statewide, and these reductions have been documented through the TAC monitoring network. As statewide sources of TACs such as gas stations and dry cleaners have been effectively controlled, remaining sources are typically highly variable, both spatially and temporally. Therefore, localized sources and exposure may not be fully characterized by data collected at these regional air monitoring network sites operated by CARB and local air districts. While CARB's GHG monitoring has effectively supported climate and air quality modeling needed to carry out CARB's climate program, the fixed GHG monitoring network is not designed to assess highly localized emission sources.

Related Community Air Protection Monitoring (AB 617)

AB 617 (C. Garcia, 2017) requires CARB and Air Districts to achieve emission reductions in communities disproportionately impacted by poor air quality. To date, 17 communities have been

selected under the program with 15 developing or implementing community-specific air pollutant monitoring through a Community Air Monitoring Plan (CAMP). CAMP development requires that Air districts work directly with a community steering committee to evaluate available monitoring options and consider factors such as cost, applicability, reliability, and data quality. Based on these factors, each selected community develops a unique CAMP to outline their monitoring objectives, methods, and actions monitoring data is intended to support. Monitoring approaches have varied from sensor networks and mobile monitoring to formal Federal Equivalent Method (FEM) stationary monitoring. Once selected, implementation occurs over an eleven-year period and one constant is that each Air District participating in the AB 617 program has invested in additional monitoring equipment. Two of the three largest Air Districts have cited limited implementation funding as the reason for declining to nominate additional communities this year for CARB's Board to consider in the selection process.

As mandated by AB 617, CARB has developed AQview, a new cloud-based data management system for collecting and providing access to all AB 617 air monitoring data from both districts and community organizations. The major objective of AQview is to make monitoring data easier to access and interpret through transparency of how data are collected and processed. These data are available now from the AQview download tool, and CARB is currently working on creating visualization tools and expanding AQview data sources with the regulatory network, low-cost sensor networks, and future community monitoring efforts.

Other Monitoring Efforts

Complementary CARB projects, such as the Study of Neighborhood Air near Petroleum Sources (SNAPS), deploy instrumentation with the objective of assessing air toxics at high temporal resolution near petroleum industry sources. The monitoring focuses on multi-pollutant measurements at a limited number of sites and surrounding areas.

Proposal

This proposal would utilize a contractor to provide mobile (car) air monitors. CARB would hold a public process to select communities that are interested in additional monitoring, with a final report by June 2025.

LAO COMMENTS

What Benefits Will New Air Monitoring Effort Provide? As discussed above, the only new program proposed is \$30 million for expanded air monitoring using mobile monitors. In concept, efforts to improve the scope and quality of air quality monitoring could have merit, as there are some gaps in the existing air quality monitoring networks, particularly at the neighborhood level. The network of monitors used to assess state compliance with federal ambient air quality standards is relatively sparse in some areas of the state, and these monitors are not intended to measure air quality at the community level. To address this gap, in recent years, funding provided to local air districts through the AB 617 program has been used to establish 14 community-level air quality monitoring networks in heavily polluted communities. However, many communities in the state still do not have robust community level air quality monitoring systems.

Although there are likely some benefits to additional air quality monitoring, based on our initial review, it is unclear why the Governor's proposal is the most effective monitoring approach. Some questions for the Legislature to consider about the proposal include:

- Why is the Administration proposing to establish a new monitoring approach instead of expanding existing monitoring efforts through AB 617?
- What is the advantage to using mobile monitoring compared to other technologies, such as stationary monitors that can measure pollution in a specific location?
- Why should the state invest in a one-time snapshot of air pollution, rather than a system that can help the state track changes in air pollution over time?
- How many areas of the state would be monitored? How does the Administration plan to select which communities will be monitored?
- How will this funding be used to inform future air quality improvement activities? For example, once the additional information is collected, how will that information be used to inform future regulatory or spending decisions?
- Will the state have any ongoing costs associated with undertaking this one-time effort?

As the Legislature considers this proposal, and weighs it against other spending priorities, it might want to direct the Administration to report at budget hearings on the questions above. This would help the Legislature evaluate the overall merits of the proposal. Without additional detail about why this new monitoring effort is the most effective approach to monitoring, the Legislature might consider redirecting this funding to other existing programs that are high legislative priorities.

STAFF COMMENTS

To further understand this proposal, this Subcommittee may wish to ask:

- How will this funding be used to inform future air quality improvement activities? For example, once the additional information is collected, how will that information be used to inform future regulatory or spending decisions? How can we ensure that this investment leads to actual actions that reduce emissions rather than just for the sake of data?
- Why is the Administration proposing to establish a new monitoring approach instead of expanding existing monitoring efforts through AB 617 or using the funding for actual emission reduction actions?
- What is the advantage to using mobile monitoring compared to other technologies, such as stationary monitors that can measure pollution in a specific location?
- Why should the state invest in a one-time snapshot of air pollution, rather than a system that can help the state track changes in air pollution over time?
- The state has already invested in methane monitoring, including with a BCP this year. How is the GHG-monitoring aspect of this program not duplicative of those other investments?

- How many areas of the state would be monitored? How does the Administration plan to select which communities will be monitored? Why should this be outside the AB 617 process?
- How will ARB ensure that these monitoring efforts are not duplicative of the monitoring programs run by the local air districts?
- Will the state have any ongoing costs associated with undertaking this one-time effort?

Staff recommends rejecting this proposal and using the \$30 million to increase funding for AB 617 implementation to enroll new disadvantaged communities in adopting plans to reduce emissions.

Staff Recommendation: Hold Open.

This agenda and other publications are available on the Assembly Budget Committee's website at: <https://abgt.assembly.ca.gov/sub3hearingagendas>. You may contact the Committee at (916) 319-2099. This agenda was prepared by Shy Forbes.