

To: Greenhouse Gas Reduction Fund (GGRF) Program File

From: **Yana Garcia**, Secretary, California Environmental Protection Agency *A. Yana Garcia*  
**Steven S. Cliff, Ph.D.**, Executive Officer, California Air Resources Board *S. S. Cliff*

Date: October 6, 2022

Subject: GGRF: California Air Resources Board (CARB) Expenditure Record for Fiscal Year 2022-23 Low Carbon Transportation Program

This Attestation Memorandum documents that the California Environmental Protection Agency and CARB completed the attached Expenditure Record on October 6, 2022, for the Low Carbon Transportation Program. The Expenditure Record is consistent with the statutory requirements of Government Code Section 16428.9 to support expenditures from GGRF.

This Attestation Memorandum and Expenditure Record will be submitted to CARB for public posting on the CARB website at: [www.arb.ca.gov/caclimateinvestments](http://www.arb.ca.gov/caclimateinvestments). Questions on this Attestation Memorandum or Expenditure Record may be directed to Andrew Panson, Staff Air Pollution Specialist, at [andrew.panson@arb.ca.gov](mailto:andrew.panson@arb.ca.gov).

Attachment

cc: Andrew Panson, Staff Air Pollution Specialist, California Air Resources Board

**Greenhouse Gas Reduction Fund: Expenditure Record**

California Air Resources Board (CARB)  
Low Carbon Transportation

**Authorizing legislation:** Items 3900-101-3228 and 3900-102-3228 of the Budget Act of 2022 as amended by Assembly Bill (AB) 178 (Ting, Chapter 45, Statutes of 2022) and AB 179 (Ting, Chapter 249, Statutes of 2022) appropriated CARB a total of \$746 million for the Low Carbon Transportation Program funded with Cap-and-Trade Auction Proceeds. In addition, Section 15.14 of the Budget Act provides the direction that agencies can only commit up to 75 percent of their appropriations until the Department of Finance makes a determination on the expenditure of remaining funds after the fourth Cap-and-Trade auction of the Fiscal Year (FY). Thus, initial grants will be limited to 75 percent of CARB's total appropriation.

**Element (1) A description of each expenditure proposed to be made by the administering agency pursuant to the appropriation.**

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**Agency that will administer funding**

- CARB

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**Amount of proposed expenditure and appropriation reference**

- The expenditure is \$746 million for CARB's Low Carbon Transportation Program per Items 3900-101-3228 and 3900-102-3228 of the Budget Act of 2022 as amended by AB 178 and AB 179.

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**Estimated amount of expenditures for administering agency administrative costs**

- Of CARB's State Operations appropriation per Item 3900-001-3228 of the Budget Act of 2022, approximately \$5 million is for the Low Carbon Transportation Program. Consistent with the provisions of Items 3900-101-3228 and 3900-102-3228 of the Budget Act of 2022, CARB may also use up to 5 percent of the \$746 million appropriation for CARB's administrative costs.
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***If applicable,  
identify laws or  
regulations that  
govern how funds  
will be used***

- AB 1532 (Pérez, Chapter 807, Statutes of 2012), Senate Bill (SB) 535 (de León, Chapter 830, Statutes of 2012), SB 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012), SB 862 (Committee on Budget and Fiscal Review, Chapter 36, Statutes of 2014), and AB 1550 (Gomez, Chapter 369, Statutes of 2016) provide the general framework for how the auction proceeds will be administered to further the purposes of AB 32.
  - SB 1275 (De León, Chapter 530, Statutes of 2014) establishes the Charge Ahead California Initiative with the goals of placing one million zero-emission and near zero-emission vehicles in California by 2023 and increasing access to these vehicles for lower-income consumers and consumers in disadvantaged communities. SB 1275 provides direction to CARB on implementation of light-duty vehicle incentive programs including those funded with Cap-and-Trade auction proceeds.
  - SB 1204 (Lara, Chapter 524, Statutes of 2014) creates the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program, funded with Cap-and-Trade auction proceeds, to support the development, demonstration, pre-commercial pilot, and early commercial deployment of zero-emission and near zero-emission technologies with priority given to projects that benefit disadvantaged communities. SB 1204 establishes specific requirements related to how CARB prioritizes and selects projects. SB 1403 (Lara, Chapter 370, Statutes of 2018) and AB 2145 (Reyes, Chapter 370, Statutes of 2018) provide additional direction on these clean truck, bus, and off-road vehicle and equipment investments.
  - AB 398 (E. Garcia, Chapter 135, Statutes of 2017) prioritized air toxic and criteria air pollutants from stationary and mobile sources and low- and zero-carbon transportation alternatives among others for expenditures from the Greenhouse Gas Reduction Fund.
  - All funds will be allocated and managed in accordance with these laws.
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***Continuation of  
existing  
Expenditure  
Record***

- This is an update to an existing Expenditure Record. This year's appropriation will support a continuing program that will fund many of the same types of projects that have already been funded under CARB's Expenditure Records for FY 2013-14 through FY 2021-22. The Expenditure Record elements being updated include the following:
    - The amount of expenditure and appropriation reference.
    - Describe the projects and/or measures that will be eligible for funding.
    - Intended recipients.
    - How the expenditure is consistent with the Investment Plan and the Scoping Plan.
    - Explain when greenhouse gas (GHG) emission reductions and/or co-benefits are expected to occur and how they will be maintained.
    - Explain how the administering agency will avoid potential substantial burdens to disadvantaged communities and low-income communities.
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**Project type(s)**

- Low carbon transportation
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**Describe the projects and/or measures that will be eligible for funding**

- Per the Budget Act of 2022 appropriations in AB 178 and AB 179, the following Low Carbon Transportation projects will be eligible for funding:
    - \$600 million for clean trucks, buses, and off-road equipment including the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), the Clean Off-Road Equipment Voucher Incentive Project (CORE), and advanced technology demonstration, and pilot commercial deployment projects.
    - \$126 million for a suite of equity transportation programs established under the Charge Ahead California Initiative, including but not limited to the Clean Cars 4 All Program.
    - \$20 million to reduce emissions from commercial harbor craft subject to regulation by CARB.
  - Please note that Section 15.14 of the Budget Act provides the direction that agencies can only commit up to 75 percent of their appropriations until the Department of Finance makes a determination on the expenditure of remaining funds after the fourth Cap-and-Trade auction of the FY. Thus, initial grants will be limited 75 percent of funding totals shown above.
  - CARB's FY 2022-23 Funding Plan for Clean Transportation Incentives (FY 2022-23 Funding Plan) will describe the expenditures that will be made pursuant to this appropriation in greater detail.
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***Intended recipients***

- Consumers, businesses, and public fleets that purchase passenger vehicles, with extra incentives available for lower-income consumers.
  - Low-income transit, car share, bike share, scooter share, or other clean mobility service users eligible to participate in the Clean Mobility Options, Sustainable Transportation Equity Project, or other mobility-related projects that CARB funds under the equity transportation programs established under the Charge Ahead California Initiative budget line-item.
  - Public and private truck and off-road equipment owners and fleets.
  - Transit bus, shuttle bus, and school bus fleets.
  - Car sharing, van sharing, and other clean mobility options operators and users.
  - Advanced technology vehicle and equipment manufacturers and dealers.
  - Cities, counties, and community-based organizations.
  - Small business and sole proprietor professional landscaping services.
  - Commercial harbor craft owners.
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***Program structure  
and process for  
selecting projects  
for funding***

- The FY 2022-23 and previous years' Funding Plans describe the process for selecting projects. Some projects are selected via competitive solicitation. In other cases, a project administrator is selected via competitive solicitation, and rebates, vouchers, or other funding are then awarded to qualifying applicants on a first-come, first-served basis.
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**Element (2) A description of how a proposed expenditure will further the regulatory purposes of Division 25.5 (commencing with Section 38500) of the Health and Safety Code, including, but not limited to, the limit established under Part 3 (commencing with Section 38550) and other applicable requirements of law.**

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***How the expenditure is consistent with the Investment Plan and the Scoping Plan***

- Health and Safety Code section 39718 requires that all GGRF moneys be appropriated in a manner that is consistent with the Administration's three-year Investment Plan. For the Sustainable Transportation and Communities sector, the *Cap-and-Trade Auction Proceeds Fourth Investment Plan: FY's 2022-23 through 2024-25* states, "Investments are needed to support:
  - Development and deployment of zero-emission vehicles, equipment, and associated infrastructure, covering the technology commercialization spectrum from research and demonstration to deployment and the wide range of vehicle and equipment categories operating in California.
  - Transportation options that improve affordability and access to key destinations and reduce vehicle miles traveled (VMT), including public transit, shared mobility, land conservation, active transportation (including both shared and personally owned rideables like electric bicycles), and related infrastructure.
  - Diverse types of infill housing development in locations that improve access to and use of low-carbon transportation options and implementation of land conservation strategies to reduce VMT.
  - Community transportation needs assessments and regional and local planning for actions that help re-envision the built environment in ways that support sustainable communities and reduce VMT."The expenditures described in this record and the Funding Plan are consistent with these investment recommendations.
- California's 2017 Climate Change Scoping Plan identified key strategies and recommendations to continue reducing GHG emissions and achieve the goals and



purposes of AB 32 and related statutes. The plan identifies the following vehicle technology goals: “Through a strong set of complementary policies—including reliable incentives, significant infrastructure investment, broad education and outreach, and regulations—aim to reach 100 percent zero-emission vehicle (ZEV) sales; and make significant progress in ZEV penetrations in non-light-duty segments.” The expenditures described in the record and the Funding Plan will help implement these Scoping Plan goals.

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**Element (3) A description of how a proposed expenditure will contribute to achieving and maintaining greenhouse gas emission reductions pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.**

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***Describe how expenditures will facilitate the achievement of GHG emission reductions in the State***

- Expenditures will achieve GHG emission reductions by funding the purchase of ZEVs, equipment, and associated infrastructure, which emit less GHG emissions than comparable conventionally fueled vehicles or equipment.
- Expenditures may also achieve GHG reductions by funding projects that displace VMT.

***Explain when GHG emission reductions and/or co-benefits are expected to occur and how they will be maintained***

- The expected time frame when reductions will be achieved and the length of time these expenditures will maintain GHG reductions varies by project.
  - The clean truck, bus, and off-road equipment projects and the transportation equity projects will generally start providing GHG emission reductions in 2022 or 2023. However, there can be a time lag between project kickoff and vehicle deployment at which time GHG reductions will be realized for some projects because the initial phases involve project development and design.
  - The project life for these projects varies between 3 years and 15 years. The expected project life for each project will be listed in the 2022-23 Funding Plan.
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**Element (4) A description of how the administering agency considered the applicability and feasibility of other non-greenhouse gas reduction objectives of Division 25.5 (commencing with Section 38500) of the Health and Safety Code.**

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***Expected co-benefits, particularly environmental, economic, public health and safety, and climate resiliency***

- In addition to providing GHG benefits, these expenditures will provide air quality, public health, and economic benefits.
  - Air Quality and Public Health Benefits: All clean vehicle projects will reduce criteria pollutant forming emissions of nitrogen oxides (NO<sub>x</sub>), reactive organic gases (ROG), and particulate matter (PM) that contribute to ozone and particulate matter air pollution. By reducing NO<sub>x</sub>, ROG, and PM emissions, these projects help California meet the health-based air quality standards and reduce toxic hot spots in California, including those near freight hubs. Several of the projects may be designed to limit participation to the regions of California in and near disadvantaged communities in order to maximize air quality and public health benefits in these regions. Clean truck, bus, and heavy-duty equipment projects will also reduce emissions of diesel particulate matter, a toxic air contaminant, thereby reducing toxic risk to Californians.
- Economic Benefits: Several companies that manufacture vehicles eligible for CARB Low Carbon Transportation funding are located in California. The incentives which encourage the purchase of these vehicles provide an economic benefit to these companies and support California-based jobs. Overall, financial incentives provided through these projects help reduce vehicle purchase costs and fuel cost for consumers, businesses, and public fleets. CARB will provide an estimate of the jobs supported by these investments in the FY 2022-23 Funding Plan.

***How the project will support other objectives of AB 32 and related statutes***

- The clean vehicle and equipment technologies being funded provide criteria pollutant and air toxics co-benefits thereby complementing the State's efforts to improve air quality.
- Many projects are focused on direct investments in disadvantaged communities in California and provide economic benefits to consumers, businesses, and public fleets.
- The projects are open to consumers, businesses, and public and private fleets statewide that purchase qualifying vehicles thereby providing an opportunity for small businesses, affordable housing associations, and other community institutions to participate in and benefit from statewide efforts to reduce GHG emissions.

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***Percentage of total funding that will be expended for projects that are located in and benefit priority populations<sup>1</sup> per CARB guidance***

- For each annual appropriation, CARB staff establish the minimum percentage of funds that must be invested in projects meeting one of the AB 1550 criteria: projects located within and benefiting individuals living in disadvantaged communities; projects within and benefiting low-income communities or benefiting low-income households statewide; and projects in low-income communities that are within one-half mile of a disadvantaged community. The priority population benefits for the FY 2022-23 Low Carbon Transportation Program appropriation will be posted on the California Climate Investments Funding Guidelines website (<https://ww2.arb.ca.gov/resources/documents/california-climate-investments-funding-guidelines-administering-agencies>) when it is determined later in 2022.

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<sup>1</sup> Priority populations include residents of: (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535; (2) census tracts identified as low-income per AB 1550; or (3) a low-income household per AB 1550. See Section VII.B for more information on the definitions of priority populations.

***Describe the benefits to priority populations per CARB guidance***

- Projects will provide incentives for vehicles or equipment that reduce criteria air pollutant or toxic air contaminant emissions.
  - Some projects will provide greater mobility and increased access to clean transportation for residents of a disadvantaged community or low-income community by placing services in that community such as ride-sharing, car-sharing, and other advanced technology mobility options.
  - Some projects provide greater mobility and increased access to clean transportation for residents of a disadvantaged or low-income community, or a low-income household, by providing incentives for the retirement or replacement of older, higher-emitting vehicles.
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***Explain strategies the administering agency will use to maximize benefits to disadvantaged communities***

- CARB is pursuing a number of strategies to maximize benefits to disadvantaged communities. These include, among others: requiring that certain projects be located in or benefit disadvantaged communities in order to be eligible to receive funding; providing higher incentives for vehicles that operate in disadvantaged communities for some project categories; and increasing outreach to disadvantaged communities.
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***Explain how the administering agency will avoid potential substantial burdens to disadvantaged communities and low-income communities or, if unknown, explain the process for identifying and avoiding potential substantial burdens***

- CARB has included a number of provisions in its Low Carbon Transportation program to help disadvantaged communities, low-income communities, and low-income households access funding. The transportation equity project appropriation is specifically designed to provide incentives for these priority populations. The transportation equity projects provide opportunities for clean vehicle ownership through the Clean Cars 4 All scrap and replace programs and financing assistance projects as well as improved mobility through car sharing, bike sharing, vanpools, ride-hailing, school bus replacement, and other clean mobility options.
  - For its heavy-duty vehicle investments, CARB provides higher HVIP voucher amounts for vehicles that operate in disadvantaged communities and higher CORE voucher amounts for freight equipment operating in disadvantaged or low-income communities in order to provide benefits to these priority populations.
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**Element (5) A description of how the administering agency will document the result achieved from the expenditure to comply with Division 25.5 (commencing with Section 35800) of the Health and Safety Code.**

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***How the administering agency will track / report progress to make sure projects are implemented per requirements in statute and CARB guidance***

- Through its grant agreements, CARB will require funding recipients to maintain records and submit regular status reports. In addition, CARB will conduct periodic reviews of selected projects. If a funding recipient does not perform in accordance with program requirements, the recipient will be subject to remedies for non-performance.

***Describe the approach that will be used to document GHG emission reductions and/or other benefits before and after project completion***

- CARB will use several mechanisms to both prospectively estimate project GHG benefits and co-benefits and retrospectively document the results achieved from its expenditures.
  - CARB will provide preliminary estimates of potential GHG benefits and co-benefits for proposed projects and describe its quantification methodology as part of the FY 2022-23 Funding Plan. Additional information on the methods for estimating emission benefits is available on CARB's Quantification Materials website (<https://ww2.arb.ca.gov/resources/documents/cqi-quantification-benefits-and-reporting-materials>).
  - In addition to these prospective benefits estimates, CARB will collect all data necessary to document the emission reductions achieved. CARB will include data collection and reporting requirements for Program Administrators as part of its grant agreements. This will include all information necessary to document the benefits for disadvantaged communities, consistent with CARB's Funding Guidelines.
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***Type of information that will be collected to document results, consistent with CARB guidance***

- To determine the job benefits, the agency will compile data from funding recipients on jobs provided, both the quality and quantity, consistent with CARB guidance.
- CARB will collect all data necessary to document the emission reductions achieved and will include data collection and reporting requirements for Program Administrators as part of its grant agreements. This includes location data, the technology funded, the dollar amount of each rebate, and other data as specified in CARB's Funding Guidelines.
- Once operational, the administering agency will collect information on project outcomes for a percentage of projects for select programs, consistent with CARB guidance.

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***How the administering agency will report on program status***

- CARB will provide regular updates on its Low Carbon Transportation expenditures, project status, and benefits in future annual reports to the Legislature prepared according to CARB's Funding Guidelines. At a minimum, the reports will include expenditure amounts, current estimates of GHG emission reductions, and quantification of co-benefits including criteria pollutant emission reductions.
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