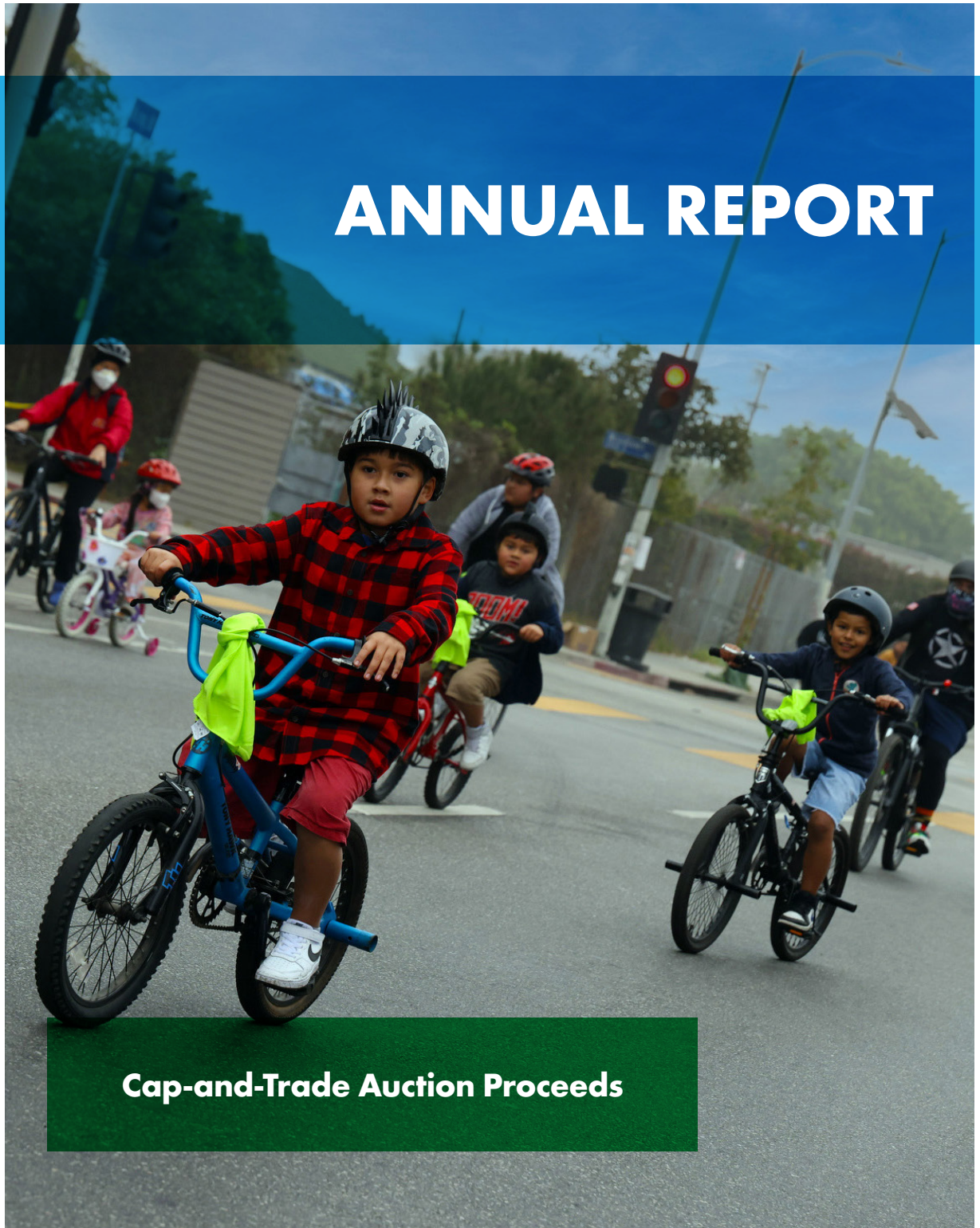
2022

CALIFORNIA CLIMATE INVESTMENTS

Cap and Trade Dollars at Work

ANNUAL REPORT



Cap-and-Trade Auction Proceeds

Cover image courtesy of Brian Feinzimer and CicLAvia
South Los Angeles, December 2021 | Sustainable Transportation Equity Project

Annual Report to the Legislature on

California Climate Investments Using Cap-and-Trade Auction Proceeds

GREENHOUSE GAS REDUCTION FUND MONIES

April 2022

CONTENTS

EXECUTIVE SUMMARY

Across California, 73 California Climate Investments programs administered by 22 state agencies are continuing to direct billions of dollars into our state's transition to a low-carbon and more equitable future. In 2021, California Climate Investments implemented $2.1 billion, bringing the cumulative total to almost $10.5 billion.

These dollars are delivering major economic, environmental, and public health benefits for Californians, including meaningful benefits to the most disadvantaged communities and low-income communities and households. Programs are reducing greenhouse gas (GHG) emissions by supporting incentives for zero-emission vehicles and equipment, increasing mobility through transit projects, diverting organic waste from landfills to composting, and more. California Climate Investments is also implementing a variety of nature-based solutions to sequester carbon and prevent GHG emissions through such strategies as protecting forests from catastrophic wildfire, supporting sustainable agricultural lands, and growing urban forests.

In 2021 alone, California Climate Investments programs implemented over 75,000 new projects, such as

CUMULATIVE OUTCOMES

$18.3 B APPROPRIATED

$10.5 B IMPLEMENTED

GHG 76.0 MMTCO$_2$e REDUCED

- 50% of funding benefiting priority populations ($5.2 billion)
- 563,812 individual projects implemented
- 8,939 affordable housing units under contract
- 170,000 urban trees
- 800+ transit agency projects funded, adding or expanding transit service
- 419,000+ rebates issued for zero-emission and plug-in hybrid vehicles
- 721,000 acres of land conserved or restored
- 70,000 tons of criteria air pollutant reductions

November 2021

zero-emission vehicle rebates, equipment replacements, and individual household energy efficiency upgrades. Projects implemented in 2021 are expected to reduce 9.6 million metric tons of carbon dioxide equivalent (MMTCO2e) over project lifetimes.

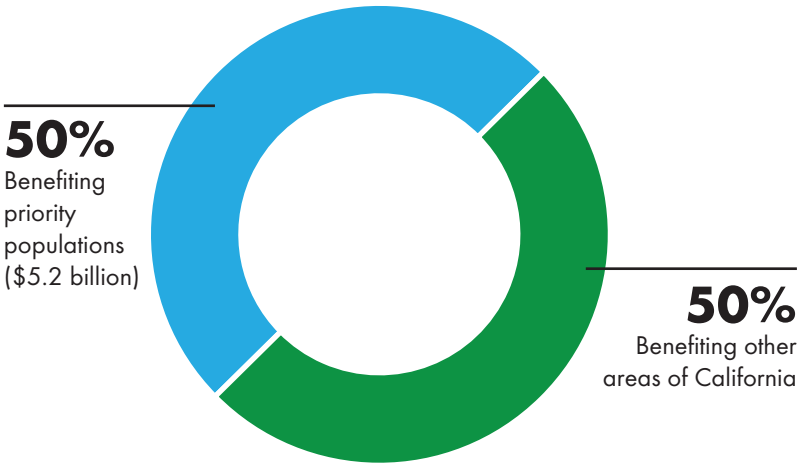
Investments implemented since the inception of California Climate Investments are expected to reduce 76.0 $MMTCO_2e$ over project lifetimes, in addition to an expected 102 $MMTCO_2e$ of reductions attributable to the High-Speed Rail Project.[1]

Building on the successes of California Climate Investments, the state is bringing unprecedented funding levels from multiple sources to bear on climate issues, including funding for both existing California Climate Investments programs and new efforts. In 2021, the state passed a historic $15 billion climate package, of which a portion is funded through the GGRF, to provide sustained funding for an integrated suite of programs to address climate change.[2]

Benefits to Priority Populations

As shown in Figure ES1, 50 percent, or nearly $5.2 billion, in cumulative implemented California Climate Investments project dollars are benefiting disadvantaged communities and low-income communities and households, collectively referred to as priority populations.[3] These investments greatly exceed the statutory minimums and are providing a variety of benefits statewide.

Figure ES1: Cumulative Benefits to Priority Populations



Learn more about priority populations on the *California Climate Investments website*, including statutory minimums, disadvantaged community designations, and investments by census tract.

1 Estimated GHG emissions reductions from the California High-Speed Rail project are over its first 50 years of operating life, as detailed in the *2021 California High-Speed Rail Sustainability Report*.

2 *California State Budget 2021-22; Budget Addendum*

3 Projects awarded prior to August 2017 were subject to the legacy investment requirements established by Senate Bill 535 (De León Chapter 830, Statutes of 2012); projects awarded since then are subject to Assembly Bill 1550 (Gomez, Chapter 369, Statutes of 2016), which established new investment minimums for low-income communities and low-income households.

Providing Other Benefits to California

In addition to reducing GHG emissions and ensuring a substantial portion of project dollars benefit priority populations, California Climate Investments are also creating and supporting employment opportunities, improving public health and the environment, advancing low- and zero-emission technologies, and more. Cumulatively, implemented projects added over 8,900 new affordable housing units, issued more than 419,000 rebates for zero-emission or plug-in hybrid vehicles, and, over project lifetimes, are expected to reduce criteria air pollutants by over 70,000 tons and contribute to 324 avoided emergency room visits for respiratory illness and asthma.

Engage with California Climate Investments

Cap and Trade Dollars at Work

The *2022 Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds* is a key resource for tracking progress on the status and outcomes of California Climate Investments, which are funded by *Cap-and-Trade auction proceeds deposited into the Greenhouse Gas Reduction Fund*.

Visit the *California Climate Investments website* to view the latest information about individual programs, projects, and California Climate Investments throughout the year. Follow California Climate Investments on social media to stay engaged, learn about funding opportunities, hear program updates, and more:

- *@CAClimateInvest*
- *@CAClimateInvest*
- Subscribe to the *bimonthly newsletter* to stay up to date on opportunities to engage and provide comments, current news, and upcoming solicitations for California Climate Investments programs.

INTRODUCTION

Since the Greenhouse Gas Reduction Fund (GGRF) was established in 2012, California Climate Investments has grown significantly in size and in impact. Just 12 agencies were administering 20 programs when the first Annual Report was released in 2015. Today, California Climate Investments includes 22 agencies and 73 programs. These programs are taking innovative approaches to producing multiple, cross-cutting benefits. With more than $2.1 billion in new projects implemented across California in 2021 alone, California Climate Investments is putting Cap-and-Trade dollars to work across nearly every sector of the economy with an emphasis on benefiting disadvantaged communities and low-income communities and households.

The breadth and depth of California Climate Investments drives significant greenhouse gas (GHG) emissions reductions and supports the transition to a low-carbon future while simultaneously providing additional benefits. Not only are programs supporting a variety of project types such as waste diversion, natural and working lands, and clean mobility, but they are also providing new opportunities for highroad jobs, improved air quality, new housing, and more. California Climate Investments is well-positioned to help address climate change and continue advancing new technologies and practices to accelerate reduction of GHG emissions in ways that also address other pressing state needs.

This past year has underscored why climate change remains a top priority for California. The International Panel on Climate Change issued its most dire warning yet, urging strong, rapid, and sustained reductions in GHG emissions to limit climate change and avoid the worst impacts.[4] In 2021, California once again experienced devastating wildfires that destroyed communities, ravaged forests, and worsened air quality. Extreme heat days and the drought emergency imperiled public health and tested the state's resilience. In some regions, California responded to multiple climate risks such as drought, wildfire, and extreme heat simultaneously. On top of the climate crisis, the state has faced

4 *International Panel on Climate Change Sixth Assessment Report*. 2021.

the ongoing challenge of COVID-19 response and recovery. These impacts are, and will continue to be, most severely experienced by people of color, low-income communities, and other vulnerable populations.

Equity and environmental justice issues are core to California Climate Investments. Across the portfolio, California Climate Investments is continually working to target investments where they are most needed; foster equitable access to funds through outreach, technical assistance, and capacity building; and support community priorities and leadership. As the impacts of climate change have quickly intensified, becoming more widespread, rapid, and severe across the globe and the state, California Climate Investments is addressing climate change head-on by strengthening the economy, advancing environmental justice, and improving public health and the environment.

About the Annual Report

The *2022 Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds* (2022 Annual Report) is a key resource for tracking progress on the status and outcomes of California Climate Investments, which are funded by *Cap-and-Trade auction proceeds deposited into the GGRF*. The Department of Finance, the California Air Resources Board (CARB), and the 22 agencies administering California Climate Investments programs work together to track and report on progress and outcomes. Administering agencies use the California Climate Investments Reporting and Tracking System to report data on program administration and implementation. This reporting system facilitates collection of project-level data that is used to develop the Annual Report and provide greater public access to data.

This report provides cumulative and annual outcomes including fiscal information, estimated GHG emissions reductions, information on benefits to disadvantaged communities and low-income communities and households (collectively referred to as priority populations), and estimates of co-benefits attributed to California Climate Investments programs. Throughout the report, project highlights demonstrate how these funds are improving lives across the state. The appendices provide summary statistics, budgetary expenditures, and data on leveraged funds and competitive proposals.

The 2022 Annual Report features several improvements over previous annual reports, resulting in a more concise, accessible, and interactive document. Project profiles are now highlighted throughout the text of this report with full project profiles and program pages available on the *California Climate Investments website*, allowing users to explore areas of interest in greater depth and easily access the most up-to-date information.

The *California Climate Investments website* includes such companion materials as:

- *Program pages* and *project profiles*: Discover achievements of individual programs and read about investments
  in action.
- *Downloadable datasets* and *geographic breakdowns* of investments: View project-level data and investments by legislative district and region.
- *Data dashboard*: Explore trends in funding, GHG emissions reductions, and other project benefits across time and programs.
- *Project map*: View locations of implemented projects along with an overview of the benefits they provide.

DATA IN THE 2022 ANNUAL REPORT ARE REPORTED AS FOLLOWS:

2021: Data reported for December 1, 2020 through November 30, 2021.
Cumulative: Data reported since a program's inception through November 30, 2021. The Legislature created the GGRF in 2012 and first appropriated funds in 2014.
To date: Information that is current as of the release of this Annual Report in April 2022.

2021 POLICY DEVELOPMENTS

Since the 2021 Annual Report, there have been several notable policy developments for California Climate Investments, including updates the California Communities Environmental Health Screening Tool (CalEnviroScreen), the initiation of an update to disadvantaged community and low-income thresholds, and the release of the *Cap-and-Trade Auction Proceeds Fourth Investment Plan for Fiscal Years 2022-23 through 2024-25*.

CalEnviroScreen 4.0

In October 2021, the *Office of Environmental Health Hazard Assessment* released version 4.0 of CalEnviroScreen, a tool that identifies communities disproportionately burdened by multiple sources of pollution. The California Environmental Protection Agency (CalEPA) uses CalEnviroScreen to inform its designation of disadvantaged communities pursuant to Senate Bill (SB) 535[5] for California Climate Investments and other initiatives. CalEnviroScreen 4.0 includes the most recent environmental and socioeconomic data, updates the way some indicators are calculated, and adds a new indicator: *Children's Lead Risk from Housing*.

Disadvantaged Communities Designation Process

Following the release of *CalEnviroScreen Version 4.0*, CalEPA determined that an update to disadvantaged communities designations was warranted, pursuant to SB 535. In October 2021, CalEPA initiated a public process to update the disadvantaged community designations. *Learn more*.

Cap-and-Trade Auction Proceeds Fourth Investment Plan

Statute requires the Department of Finance, in consultation with CARB and other state agencies, to submit a three-year investment plan to the Legislature to guide the investment of Cap-and-Trade

5 *SB 535* (De León Chapter 830, Statutes of 2012)

auction proceeds. Developed through close collaboration with state partners and an extensive public process, the *Cap-and-Trade Auction Proceeds Fourth Investment Plan for Fiscal Years 2022-23 through 2024-25* (Fourth Investment Plan) was submitted to the Legislature in January 2022 and provided six recommendations:

- Fund investments that support GGRF statutory priorities and drive progress on state climate goals in key sectors: sustainable transportation and communities; low-carbon energy, buildings, and industry; natural and working lands; livestock; and waste diversion.
- Provide dedicated funding to advance equity, environmental justice, and community participation.
- Direct funding towards high-quality jobs and high road workforce development.
- Integrate nature-based solutions and zero-emission technologies into investment types across sectors.
- Support policy-relevant research and program evaluation tied to emissions-reducing projects.
- Advance support for priority populations and other underserved communities.

The Fourth Investment Plan builds on years of California Climate Investments implementation to highlight key opportunities and present a shared vision for accelerating progress on combating climate change while supporting the state's equity, economic, and environmental goals.

New Legislation

In 2021, the state made appropriations and enacted several bills directly related to California Climate Investments, including appropriating funding for new and existing programs, establishing a new continuous appropriation, and setting new requirements for a subset of existing programs. The state passed a historic $15 billion climate package in 2021, which includes funding from the GGRF and other sources.[6] While this report captures only the investments from GGRF appropriations, the state's unprecedented multiyear investment in climate programs will accelerate both GHG emissions reductions and progress towards achieving climate goals.

New areas receiving funding from the GGRF include incentives for zero-emission small off-road engines used for professional landscaping,[7] support for local agencies in implementing SB 1383[8] requirements to divert organic waste from landfills, and a new pilot program for the California Department of Forestry and Fire Protection (CAL FIRE) to use trained volunteers to assist with defensible space creation, home hardening activities, and public education to reduce wildfire risk.[9] The Legislature also authorized $200 million to be appropriated annually from the GGRF to CAL FIRE beginning FY 2022-23 through FY 2028-29 to support their forest health, fire prevention, and fuels reductions programs.[10] In addition, legislation established requirements related to new workforce standards for a subset of California Climate Investments programs.[11] *Visit CARB's website* for more information about key legislation related to California Climate Investments.

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6 Budget bills that made appropriations from the GGRF since the 2021 Annual Report: *AB 128* (Ting, Chapter 21, Statutes of 2021), *SB 129* (Skinner, Chapter 69, Statutes of 2021), and *SB 170* (Skinner, Chapter 240, Statutes of 2021). For further information about the climate budget, see the *California State Budget 2021-22; Budget Addendum*.

7 SB 170 appropriated $30 million to CARB to incentivize zero-emission small off road equipment purchases by small businesses or sole proprietors who provide professional landscaping services in California. This funding will be implemented by CARB's Clean Off-Road Equipment Voucher Incentive Project.

8 *SB 1383* (Lara, Chapter 395, Statutes of 2016)

9 *SB 63* (Stern, Chapter 382, Statutes of 2021)

10 *SB 155* (Committee on Budget and Fiscal Review, Chapter 258, Statutes of 2021)

11 *AB 680* (Burke, Chapter 746, Statutes of 2021)

2021 OUTCOMES

California Climate Investments is directing billions of dollars into our state's transition to a low-carbon and more equitable future, with over $2.1 billion implemented from December 2020 through the end of November 2021. This brings the cumulative total to almost $10.5 billion.

In 2021 alone, California Climate Investments programs implemented over 75,000 new projects, such as zero-emission vehicle rebates, equipment replacements, and individual household energy efficiency upgrades. Projects implemented in 2021 are expected to reduce 9.6 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) over project lifetimes.

California Climate Investments implemented

$2.1 BILLION DOLLARS

in 2021 bringing the cumulative total to

$10.5 BILLION

Appendix A details implemented investments to date, including cumulative summary statistics for each California Climate Investments program that detail funding status, intermediary administrative expenses, expected GHG emissions reductions, number of implemented projects, amount of funding benefiting priority populations, and more.

For information on cumulative budgetary expenditures by program including breakdowns along budget categories such as program administration, capital outlay, and local assistance funds expended, see *Appendix B*.

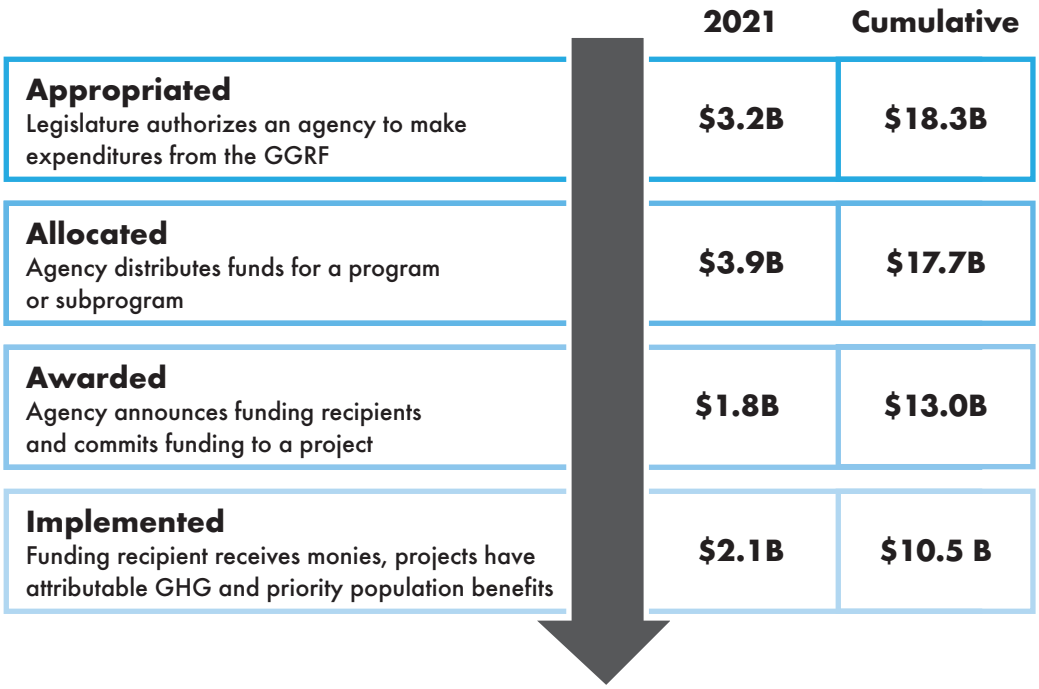
The past year saw substantial increases in implemented project dollars, driven in large part by the California Strategic Growth Council's (SGC) *Affordable Housing and Sustainable Communities Program*, CARB's *Clean Vehicle Rebate Project* and *Community Air Protection Incentives Program*, and the California High-Speed Rail Authority's *High-Speed Rail Project*. Projects implemented in 2021 also reported significant expected GHG emissions reductions over project lifetimes, with major contributions toward the annual total coming from CAL FIRE's *Forest Health Program*, the California State Transportation Agency's *Transit and Intercity Rail Capital Program,* and SGC's *Sustainable Agricultural Lands Conservation Program*.

PROGRAM PAGES

View summary statistics **on every program such as the amount of funds used to implement projects this year, benefits to priority populations, jobs created, pollution reductions, and more on the** *California Climate Investments website*. **Additional information and downloadable datasets on individual implemented projects is also available on the** *Annual Report webpage*.

The following sections provide more detailed information on the funding process, appropriations, and expected outcomes from implemented California Climate Investments.

Figure 1: Terms for Funding Status & Summary of Funding by Status



Funding Flow

To provide a clear and consistent approach for tracking and reporting funds, the following terms describe how the funding flows from the Legislature to recipients: appropriated, allocated, awarded, and implemented. Figure 1 shows working definitions for terms used to report outcomes from California Climate Investments and the amount of funding by status, progressing from when funds are initially appropriated by the Legislature through the implemented stage.[12] In 2021, the Legislature appropriated $3.2 billion to California Climate Investments programs from the GGRF. Agencies allocated $3.9 billion to programs and subprograms and awarded $1.8 billion to projects. In 2021, projects implemented $2.1 billion.

Figure 1 does not necessarily show the flow of funds from one step to the next over the course of one year. In many cases, funds appropriated in one year may be implemented in a following year as administering agencies and award recipients must complete many tasks between receiving an appropriation and implementing a project. Completing all these steps can take more than a year and may include such elements as early and continued engagement with communities and stakeholders, determining the type of projects to fund, allowing time for applicants to develop project proposals and complete applications, carefully selecting recipients to help ensure quality projects, or executing legal contracts to transfer funds to a recipient. These steps help provide a fair and transparent process designed to maximize the benefits of these expenditures for communities and the state.

12 These terms are specific to the reporting and tracking of California Climate Investments and may differ from the terms used by individual administering agencies.

Appropriations

Cumulative Appropriations
$18.3 BILLION

FY 2021-2022 Appropriations
$3.2 BILLION

California Climate Investments is funded by proceeds from the sale of state-owned allowances from quarterly *Cap-and-Trade auctions that are deposited into the GGRF*. The Legislature appropriates money from the GGRF to agencies to administer California Climate Investments programs. Five agencies receive approximately 65 percent of the proceeds to support a collection of programs focused on transit, affordable housing, and safe drinking water.[13] In addition to these continuous appropriations, the Legislature has continuously appropriated $200 million annually from FY 2022-23 through FY 2028-29 for forest health, fire prevention, and fuel reduction programs.[14]

Additional legislation identifies other transfers and obligations from the GGRF, including a transfer to offset a suspended manufacturing tax and use fee, the replacement of a fire prevention fee in State Responsibility Areas, and an ongoing commitment for funding forest health, fire prevention, and fuels reduction projects.[15] The Legislature appropriates the remaining available GGRF funds through the annual budget process.

To date, the sale of state-owned allowances through Cap-and-Trade auctions have generated $19.2 billion for the GGRF. The Legislature appropriated $3.2 billion for FY 2021-2022, bringing the cumulative total of appropriations to $18.3 billion.

Table 1 shows which programs were appropriated new GGRF dollars in the past year and cumulative appropriations for investments as of November 30, 2021. This report does not track funding from other sources.

13 See *SB 862* (Committee on Budget and Fiscal Review, Chapter 36, Statutes of 2014) and *SB 200* (Monning, Chapter 120, Statutes of 2019).

14 See *SB 901* (Dodd, Chapter 626, Statutes of 2018). SB 155 formalizes this commitment by establishing a continuous appropriation beginning in FY 2022-23 through FY 2028-29.

15 See SB 155.

Table 1: FY 21-22 and Cumulative Appropriations

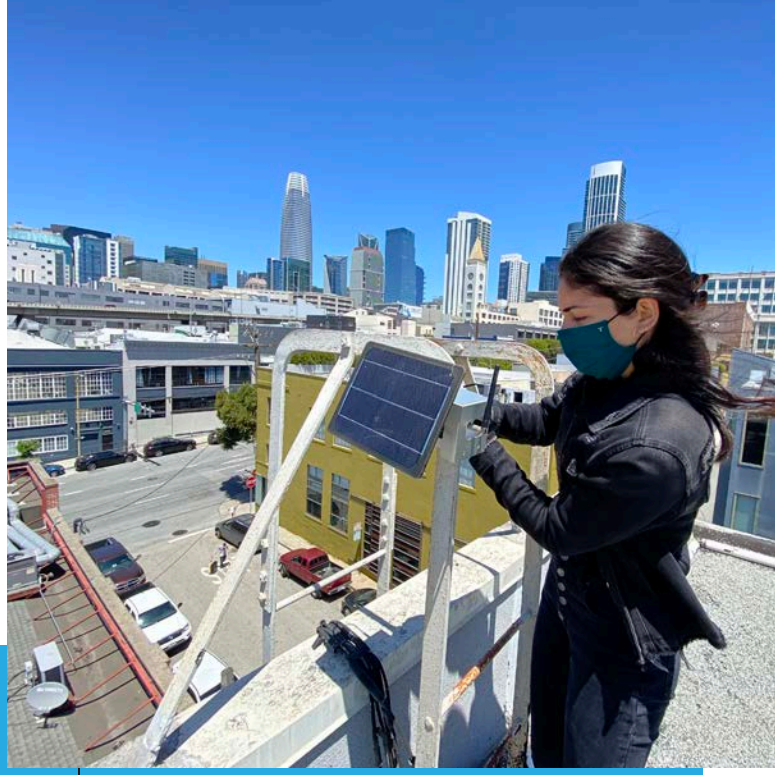
Administering Agency	Program	Appropriations ($M)[16,17]		
		Cumulative Appropriations Prior to FY 21-22	FY 21-22	Cumulative Total[18]
California Air Resources Board	Community Air Protection	$765	$320	$1,085
	Fluorinated Gases Emission Reduction Incentives	$1	–	$1
	Funding Agricultural Replacement Measures for Emission Reductions Program	$251	$170	$421
	Low-Carbon Transportation Program	$2,134	$595	$2,729
	Prescribed Fire Smoke Monitoring Program	$4	–	$4
	Woodsmoke Reduction	$8	$5	$13
California Coastal Commission	Coastal Resilience Planning	$5	$1	$5
California Conservation Corps	Training and Workforce Development	$56	$15	$71
California Department of Community Services and Development	Low-income Weatherization	$212	$15	$227
California Department of Fish and Wildlife	Wetlands and Watershed Restoration	$47	–	$47
California Department of Food and Agriculture	Dairy Methane	$289	–	$289
	Healthy Soils Program	$41	$25	$66
	Renewable Alternative Fuels	$3	–	$3
	State Water Efficiency and Enhancement Program	$63	–	$63
California Department of Forestry and Fire Protection	Community Fire Planning and Preparedness	$10	–	$10
	Fire Prevention Program	$276	$82	$358
	Forest Carbon Plan Implementation	$95	$35	$130
	Sustainable Forests	$784	$190	$974
California Department of Resources Recycling and Recovery	Waste Diversion	$139	$130	$269

16 Appropriations listed are estimates based on published budgets, legislation, quarterly Cap-and-Trade auction results, and reversions of unused funds, rounded to the nearest million dollars. Administering agencies may also transfer appropriations to other state agencies to implement programs.

17 Appropriations from previous fiscal years may be retroactively adjusted to account for budget control sections or for special legislation (e.g., budget trailer bills). As a result, reported cumulative appropriations may not reflect summations of budget act line items.

18 Listed values may not sum due to rounding.

Administering Agency	Program	Appropriations ($M)[16,17]		
		Cumulative Appropriations Prior to FY 21-22	FY 21-22	Cumulative Total[18]
California Department of Transportation	Active Transportation Program	$10	–	$10
	Low-Carbon Transit Operations Program	$684	$122	$806
California Department of Water Resources	State Water Project Turbines	$20	–	$20
	Water-Energy Grant Program	$48	–	$48
California Energy Commission	Food Production Investment Program	$124	–	$124
	Low-Carbon Fuel Production Program	$13	–	$13
	Renewable Energy for Agriculture Program	$10	–	$10
California Environmental Protection Agency	Transition to a Carbon-Neutral Economy	$3	–	$3
California Governor's Office of Emergency Services	Wildfire Response and Readiness	$31	$1	$32
California High-Speed Rail Authority	High-Speed Rail Project	$3,961	$608	$4,569
California Natural Resources Agency	Regional Forest and Fire Capacity	$20	–	$20
	Urban Greening Program	$156	–	$156
California State Coastal Conservancy	Climate Ready Program	$7	–	$7
California State Transportation Agency	Transit and Intercity Rail Capital Program	$1,480	$243	$1,723
California State Water Resources Control Board	Safe and Affordable Drinking Water Fund	$227	$122	$349
California Strategic Growth Council	Affordable Housing and Sustainable Communities Program (including Sustainable Agricultural Lands Conservation)	$2,782	$486	$3,268
	Climate Change Research Program	$36	–	$36
	Technical Assistance Program	$6	–	$6
	Transformative Climate Communities Program	$241	–	$241
California Wildlife Conservation Board	Climate Adaptation and Resiliency Program	$20	–	$20
California Workforce Development Board	Low-Carbon Economy Workforce	$36	$3	$39
San Francisco Bay Conservation and Development Commission	Climate Change Adaptation and Coastal Resilience Planning	$5	$2	$6
Total		**$15,102**	**$3,168**	**$18,270**



Community-Driven Solutions

California Climate Investments are increasingly funding projects that directly build the capacity of communities to design and implement projects that result in more equitable environmental, economic, and social outcomes.

Environmental justice nonprofit Brightline Defense was awarded funds from CARB's *Community Air Grants Programs* to lead a community-driven project that will install, collect, and analyze data from 15 stationary air quality sensors in heavily populated, low-income communities throughout eastern San Francisco County. The data these sensors collect are publicly available and can be used to help shape programs and policies to create cleaner air in these communities.

Additionally, the project is focused on building the capacity of local organizations that serve youth and single-room occupancy (SRO) tenants to carry out air quality education and outreach initiatives. Youth leaders created and shared educational materials and videos on air quality monitoring that have exceeded 7,000 views. Brightline Defense is also working directly with SRO tenant leaders to understand and address urban environmental justice issues within SRO buildings. Through outreach and community engagement, this partnership has reached thousands of low-income city residents.

Learn more.

In the Pacoima and Sun Valley communities of the San Fernando Valley, a coalition of community members, nonprofits, and agencies known as Green Together is working to build a new generation of air quality ambassadors. With funding from a *Transformative Climate Communities Program* implementation grant, the coalition is engaging community members in designing and implementing initiatives to address the impacts of extreme heat and air pollution while reducing GHG emissions. One element of this overarching strategy is the Clean Air Ambassadors Program, which teaches community youth organizers how to collect and interpret data using scientific tools to measure local particulate matter pollution. These youth will also gain new skills in communicating about and advocating for clean air solutions.

Learn more.

BENEFITS TO PRIORITY POPULATIONS

California Climate Investments are focused on providing benefits to the state's most disadvantaged communities and low-income communities and households, collectively referred to as *priority populations*. Per SB 535 and Assembly Bill (AB) 1550,[19] a minimum of 35 percent of California Climate Investments must benefit priority populations, which include disadvantaged communities and low-income communities and households across the state.

To count an implemented project toward the investment minimums, administering agencies must show that a project provides direct, meaningful, and assured benefits and meets an important community need by using *benefit criteria tables* that CARB develops. Learn more about priority populations on the *California Climate Investments website*, including statutory minimums, disadvantaged community designations, and investments by census tract.[20]

19 *AB 1550* (Gomez, Chapter 369, Statutes of 2016)

20 Projects awarded prior to August 2017 were subject to the legacy investment requirements established by SB 535; projects awarded since then are subject to AB 1550, which established new investment minimums for low-income communities and low-income households.

Supporting Families with Affordable Housing

California Climate Investments dollars are benefiting priority populations by facilitating the construction of new, affordable housing and resident services near transit to help communities thrive. Supported in part by an award from SGC's *Affordable Housing and Sustainable Communities Program,* Resources for Community Development will provide 87 affordable rental homes in Berkeley.

In addition to large, family-sized apartments and permanent supportive housing for formerly homeless residents, the ground floor of the building will become the headquarters of Healthy Black Families, Inc., a nonprofit dedicated to the health of Black families in the community. Onsite resident and social services will help Black families and formerly homeless individuals live healthier lives and receive better health services. Wilhelmenia Wilson, Executive Director of Healthy Black Families, Inc., says, "From this 100 percent affordable housing, easily accessible location (across from Ashby BART station), Healthy Black Families, Inc. will be well positioned to connect with, advocate for, support and empower Black families in Berkeley and the surrounding communities as they advocate for and organize around the changes that matter most."

Learn more.

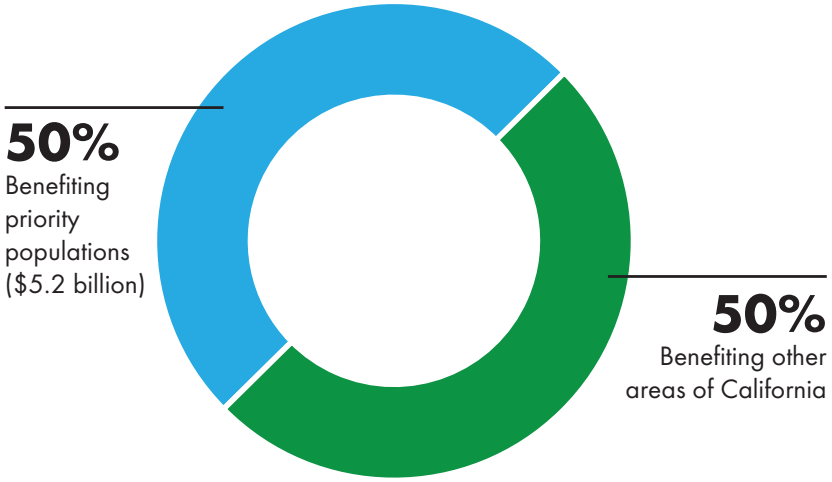
Growing Community Composting Capacity

In 2021, the California Department of Resources Recovery and Recycling launched the *Community Composting for Green Spaces* program to help increase the number of small-scale composting programs serving priority populations across the state. Led by the California Alliance for Community Composting, the first project funded through this program will develop more than 50 community composting sites in disadvantaged and low-income communities across California. Altogether, these sites are expected to divert nearly 11,000 tons of organic waste from landfills. The project will provide communities that have long experienced disproportionate environmental burdens with additional benefits including free compost, job training, and more, helping to pave the way for a healthy and equitable future for communities across the state.

Learn more.

Cumulatively, 50 percent, or nearly $5.2 billion, in implemented California Climate Investments project dollars are benefiting priority populations, as shown by Figure 2. Collectively, these investments greatly exceed the cumulative statutory minimums of 35 percent. These investments are providing a variety of benefits including cleaner air, increased mobility options, expanded access to clean energy, and new employment opportunities.

Figure 2: Cumulative Benefits to Priority Populations



LEARN MORE ABOUT PRIORITY POPULATIONS

To view a more detailed analysis of how cumulative investments are benefiting Priority Populations under SB 535 and AB 1550, visit *Priority Populations on the California Climate Investments website*.

For projects implemented in 2021, $1.1 billion of funds are benefiting priority populations. The annual totals are a useful portrayal of the amount of newly implemented funds being directed to priority populations.

Going Beyond Priority Populations

California Climate Investments also provides real benefits to underserved populations that are not explicitly identified as priority populations under statute. Programs are providing benefits to other populations such as California Native American Tribes, socially disadvantaged farmers, minority and women-owned businesses, small businesses, and others. In many cases, programs have taken specific steps to identify or define these populations and designed guidelines or developed targets to help ensure they are also able to successfully compete for funding.

For example, SGC and CDFA partnered to support *technical assistance for CDFA's Climate Smart Agriculture incentive programs*. In this model, Community Education Specialists work directly with socially disadvantaged farmers and ranchers across the state.[21] Technical assistance is available in Spanish, Mandarin, and Hmong to help complete grant applications and implement projects that increase adoption of climate smart agricultural practices. Since 2019, this technical assistance partnership has assisted over 850 farmers and ranchers across the state in developing funding applications.

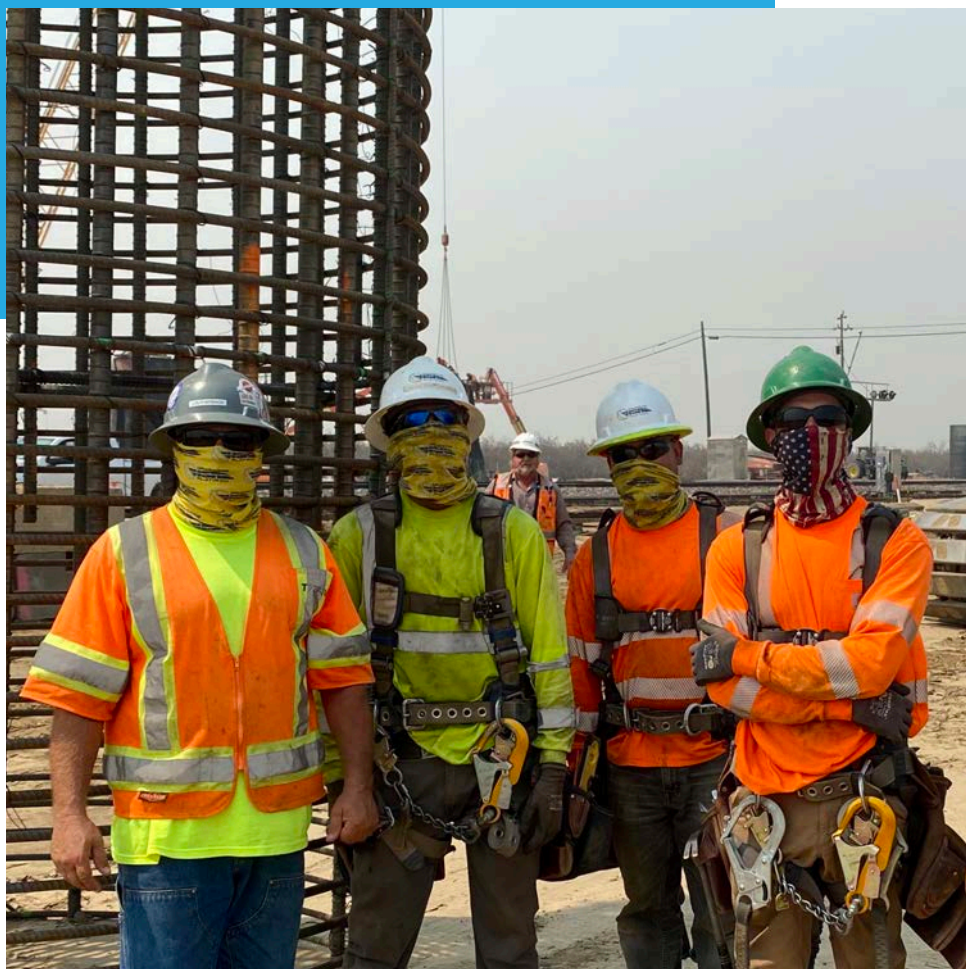
While California Climate Investments does not separately track or report the funds benefiting these populations, investments focused on these populations are consistent with the broader equity goals of the California Climate Investments program and core principles of maximizing the benefits of programs and responding to community needs.

21 As defined by the Farmer Equity Act of 2017, or AB 1348 (Aguiar Curry, Chapter 620, Statutes of 2017).

High-Speed Rail

Implementation of the High-Speed Rail Project provides a variety of benefits to Californians. For example, the High-Speed Rail Authority (Authority) focuses on small business contracting and hiring disadvantaged workers. Analysis by the Authority shows that $4.1 billion have been invested in disadvantaged communities and 65 percent of work hours have been performed by disadvantaged workers. Due to different statutory accounting and reporting requirements between California Climate Investments and the Authority, benefits from High-Speed Rail Project implementation are not currently accounted towards meeting investment minimums for benefits to priority populations. As a result, the total cumulative benefit to priority populations discussed in this document is understated. CARB and Authority staff are actively working to account for priority population benefits for future iterations of the Annual Report.

Learn more.



PROVIDING BENEFITS TO CALIFORNIA

The portfolio of California Climate Investments programs is designed not only to facilitate GHG emissions reductions but also to provide a suite of environmental, economic, and public health benefits. From affordable housing to clean transportation, urban greening to sustainable agriculture, and more, the diversity of California Climate Investments program types reflects the cross-sectoral and collaborative approaches necessary to effectively reduce GHG emissions and provide benefits to Californians across the state.

Estimated Greenhouse Gas Emissions Reductions

Administering agencies report on estimated GHG emissions reductions over project lifetimes using *CARB-developed quantification methodologies and calculator tools*. CARB staff develop quantification methodologies, in consultation with administering agencies, for California Climate Investments programs with quantifiable GHG emissions reductions. These quantification methodologies prospectively estimate GHG emissions reductions and related co-benefits, which support legislative priorities, state goals, and community benefits. Estimates are not used for offsets or compliance purposes or for tracking progress in meeting climate targets and federal air quality standards.

The over 75,000 new projects implemented in 2021 alone are expected to reduce 9.6 million $MMTCO_2e$. Cumulatively, investments reported as implemented are expected to reduce 76.0 $MMTCO_2e$ over project lifetimes, in addition to an expected 102 $MMTCO_2e$ in reductions attributable to the High-Speed Rail Project.[22]

22 Per the *California High-Speed Rail Authority 2021 Sustainability Report*.

ESTIMATED GHG EMISSIONS REDUCTIONS FROM 2021 IMPLEMENTED PROJECTS

9.6 $MMTCO_2e$

over project lifetimes

Cumulatively, California Climate Investments are expected to reduce

76.0 $MMTCO_2e$

over project lifetimes

Table 2 shows cumulative GHG emissions reductions since the inception of California Climate Investments. In 2015, the first year of implemented projects were estimated to reduce 9.5 $MMTCO_2e$ over project lifetimes. As the number of cumulative implemented funds has grown, estimated GHG emissions reductions have increased as well. From $514 million in 2015 to now $10.5 billion in implemented funds, California Climate Investments is continuing to invest funds in projects that are reducing GHG emissions.

Table 2: GHG Emissions Reductions Over Time

Reporting Year	Cumulative Implemented Funds	Cumulative GHG Emissions Reductions (MMTCO2e) [23]
2015	$514.0 M	9.5
2016	$1.2 B	14.3
2017	$2.0 B	21.3
2018	$3.2 B	39.1
2019	$5.1 B	47.6
2020	$8.3 B	66.3
2021	$10.5 B	76.0

Reducing Greenhouse Gas Emissions

Reducing GHG emissions is the core objective of California Climate Investments. Programs are achieving this objective in a variety of ways by providing incentives for zero-emission vehicles, funding clean transit, installing solar panels that benefit low-income households, promoting active transportation, diverting waste from landfills, and much more.

Some California Climate Investments programs are addressing climate change through projects that reduce short-lived climate pollutants. For example, the California Department of Resources Recovery and Recycling's *Organics Grants* program is supporting new high-solids anaerobic digesters to reduce GHG emissions from green waste and food waste.

CARB's *Fluorinated Gas Reduction Incentive Program* is funding the installation of new refrigeration systems that operate without super-polluting hydrofluorocarbon gases, which result in significant near-term GHG emissions reductions.

Other programs are implementing a variety of nature-based solutions to sequester carbon, increase resilience to climate impacts, and prevent GHG emissions. For example, SGC's *Sustainable Agricultural Lands Conservation Program* facilitates avoided GHG emissions by protecting prime farmland from being converted to more carbon-intensive land uses that increase personal travel. CDFA's *Healthy Soils Program* sequesters carbon while increasing soil organic matter. Both programs support natural and working lands that provide life-sustaining resources including clean air, water, and food.

Learn more about how California Climate Investments programs are working to reduce GHG emissions on the *California Climate Investments website*.

23 These values do not reflect an additional 102 $MMTCO_2e$ in expected GHG emissions reductions from the first 50 years of the California High-Speed Rail project's operating life.

Promoting Pathways of Projects from Planning to Implementation

Reducing GHG emissions and realizing truly transformative climate action requires a diverse coalition of participants, including community members, organizations, local and regional governments, local businesses, and many others. The state must support these partners with resources to actively participate in and lead the planning, selection, design, implementation, and evaluation of programs and projects.

Newly implemented in 2021, CARB's *Sustainable Transportation Equity Project* (STEP) aims to reduce GHG emissions, address community residents' transportation needs, and increase access to key destinations. The program funds capacity building and planning to help build a pathway of projects that are born from the priorities and needs of communities, as well as projects that then implement communities' visions.

Supported by a STEP planning grant, the Rebound the MLKcommUNITY project in Southeast Bakersfield will deliver an inclusive, community-centered planning process that can support California's efforts to reduce GHG emissions from transportation while empowering those with limited clean transportation access to develop a roadmap and implementation strategy centered on mobility equity. By the end of this project, community members will have the education, tools, and knowledge needed to take the next steps to bring their community-developed roadmap to life through new partnerships, funding applications, and clean mobility pilot projects inspired by the work of the planning grant.

Through a STEP implementation grant, the South Los Angeles Universal Basic Mobility Pilot Program is testing, deploying, and delivering expanded clean transportation options for South LA residents, all guided by a collaborative decision-making structure. This project involves a wide range of components that are expected to facilitate 583 $MTCO_2e$ in GHG emissions reductions over project lifetimes, including a mobility wallet that integrates fare payments across multiple transportation options, an e-bike and e-cargo bike lending library, on-demand electric shuttle service, workforce training on electric vehicle maintenance, and more. By expanding access to clean mobility options and focusing on serving the most vulnerable users, including youth, older adults, women, and people who are disabled or experiencing homelessness, this project will build resilience in these climate-impacted neighborhoods.

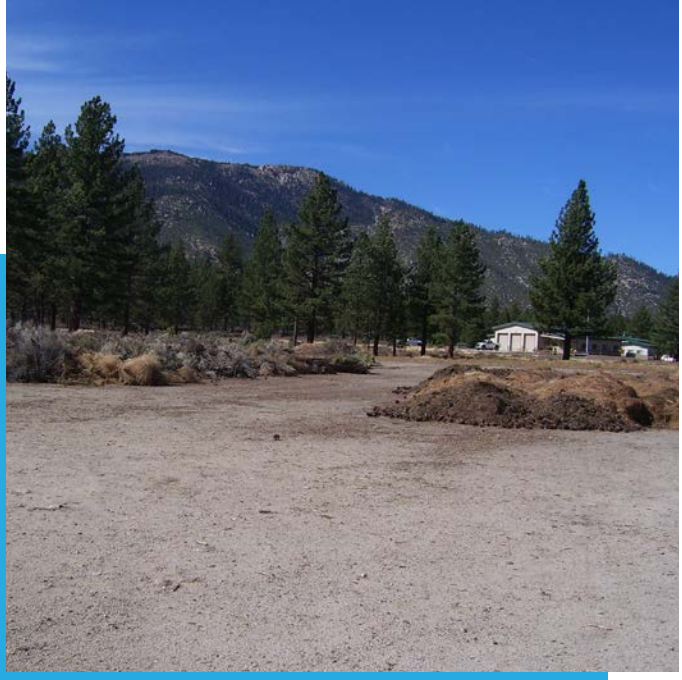
Learn more.

INVESTMENTS IN ACTION

Preventing Fire and GHG Emissions

Alpine County is using funds from CAL FIRE's *Fire Prevention Grants Program* to provide communities with a place to send green waste and biomass removed while creating defensible space around their properties. The Turtle Rock Park Biomass Collection site reduces air pollution and GHG emissions by composting this material instead of burning it. The defensible space clearance made possible by the Turtle Rock Park Biomass Collection site has already helped prevent wildfires from destroying homes and spreading to additional communities. In July 2021, the advance burning of the Tamarack Fire toward Marklee Village and Markleeville was thwarted due to the diligent efforts of residents practicing defensible space and hauling green waste to the biomass collection site.

Learn more.



Cost-effectiveness of GHG Emissions Reductions

Appendix A details the effectiveness in achieving GHG emissions reductions relative to project cost. These figures do not account for other funding sources (leveraged funds) that may also support these investments. Overall, California Climate Investments are reducing GHG emissions at an average cost of $138 per $MTCO_2e$,[24] not including GHG emissions reductions attributable to the High-Speed Rail Project.

California Climate Investments programs are reducing GHG emissions at an average cost of

$138 PER $MTCO_2e$

Cost-effectiveness of GHG emissions reductions is an important metric but does not fully capture the important benefits that California Climate Investments programs provide in supporting the transition to an equitable, low-carbon future. For example, some programs are directing funding towards engagement, outreach, and capacity building to help ensure community members have the resources and skills necessary to design and implement projects that address local needs. Others are mobilizing public funds to spur innovation of the next generation of clean energy technologies.

24 Some programs are designed to facilitate GHG emissions reductions but not to directly reduce emissions. The costs of those programs are included in the cost effectiveness average, which represent the portfolio wide average for all California Climate Investments, not including GHG emissions reductions attributable to the High-Speed Rail Project.

INVESTMENTS IN ACTION

Incentivizing Next Generation Technologies

Incentive programs are helping to accelerate innovation and uptake of emerging zero-emission technologies. For example, CARB's *Clean Off-road Equipment Voucher Incentive Project* encourages California fleets to purchase or lease zero-emission off-road equipment by offsetting the higher cost of such equipment through a streamlined voucher process. SSA Marine purchased 20 zero-emission forklifts and associated charging infrastructure for their locations in Stockton and West Sacramento with Clean Off-road Equipment Voucher incentives. This equipment will help reduce GHG emissions and air pollutants in census tracts that are heavily burdened by diesel particulate matter and other air pollutants.

"For buyers, using Clean Off-road Equipment Voucher incentives means that equipment with no pollution will cost about the same as the polluting alternatives," said Bill Van Amburg, Executive Vice President of CALSTART, a nonprofit group that is administering the program. "By helping users to buy clean equipment sooner, we will boost earlier demand to increase volumes and reduce costs, as well as spur investment and innovation by manufacturers and keep California's clean economy growing."

Learn more.

Supporting Employment Opportunities

Providing direct and indirect benefits, California Climate Investments supports jobs in several ways:

- California Climate Investments projects directly employ people for project development, implementation, and maintenance.
- Projects increase access to employment opportunities for priority populations through funding for workforce development programs, convenient and sustainable transportation options, and affordable housing near job centers.
- Programs indirectly support jobs in California industries that supply the goods and services needed to implement projects.
- Projects support additional induced jobs throughout the California economy by generating additional household demand for goods and services.

As California's economy continues to transition to support clean energy, improved mobility, and sustainable land use and management, workforce needs will also transition. Not only will the types of available jobs change, the skills needed to obtain and progress in those careers will also change. California Climate Investments is facilitating this transition through dedicated workforce development and training programs, establishing partnerships with training programs and academic institutions, and investing in projects that support high-quality jobs.

Programs such as the California Conservation Corps' *Training and Workforce Development Program* provide funding for job training and workforce development. Others incorporate workforce development as a component of their programs, including the California Department of Community Services and Development's *Community Solar* program, the *High-Speed Rail Project*, and CAL FIRE's *Forest Health Program*.

Administering agencies report on jobs in two ways: modeled jobs and employment outcomes reporting. For both reporting types, the number of jobs supported is estimated in full-time equivalent employee positions over one year, equal to approximately 2,080 hours of work. Some project types will support more jobs per dollar spent than others because of differences in the mix of spending on materials, equipment, and labor across California Climate Investments project types and funding arrangements.

Modeled Jobs

For all projects, administering agencies estimate the number of jobs that will be created using *CARB's jobs co-benefit assessment methodology and calculator tool*. This methodology models the potential employment benefits from California Climate Investments projects using general employment information for various industries rather than employment information for an individual project. Modeled jobs include three types: direct, indirect, and induced.

Since CARB began collecting these data in 2017, California Climate Investments awarded funds to projects that are estimated to support over 235,000 direct, indirect, and induced jobs, with over 40,000 of those jobs attributable to funds implemented in 2021.[25] *Learn more*.

CUMULATIVE MODELED JOBS

115,000+

directly supported jobs

49,000+

indirectly supported jobs

70,000+

induced jobs

DIRECTLY SUPPORTED JOBS

Labor to complete projects through direct employment or contracted work (e.g., housing construction or ecosystem restoration) and labor to produce equipment or materials purchased (e.g., manufacturing zero-emission vehicles).

INDIRECTLY SUPPORTED JOBS

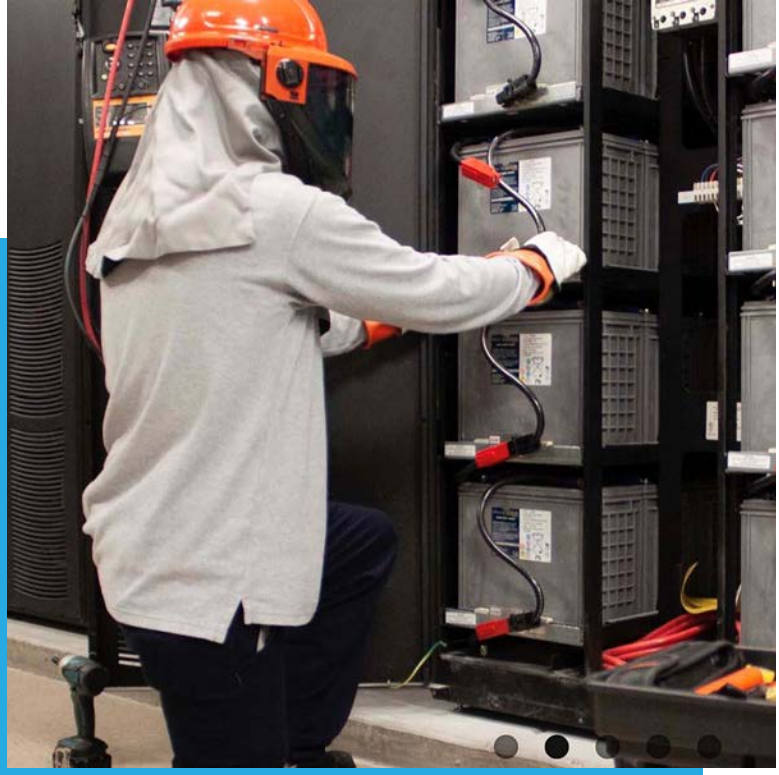
Labor related to the supply chains supporting projects. Funding a project generates demand for materials and equipment to complete the project, leading to expanded production and employment in upstream industries (e.g., manufacturing construction equipment or solar panel components).

INDUCED JOBS

Labor related to the spending of income from directly and indirectly supported jobs which in turn stimulate demand for goods and services in the wider California economy.

25 These estimates are of jobs supported by GGRF dollars, not created by these investments. Since GGRF investments are transfers of existing funds within California, it would be necessary to assess an alternative scenario without GGRF investments to establish a causal link between California Climate Investments and job creation. In addition, the model is unable to estimate when these jobs will occur or how long the jobs will last (i.e., the difference between temporary construction jobs and permanent implementation or maintenance positions).

Building Careers for a Low-carbon Future



California Climate Investments' workforce training and development projects are part of a larger initiative to transition to a low-carbon economy that prioritizes high-quality, family-supporting jobs across multiple industries and sectors.

The California Workforce Development Board's *Low-Carbon Economy Workforce* program is providing new opportunities for priority populations to access advanced and specialized training. The Expanding Energy Storage and Microgrid Training and Certification project is increasing the number of Electrical Joint Apprenticeship Training Centers (Training Centers) from 6 to 21 centers located across the state. These Training Centers will help electricians and apprentices earn the Energy Storage and Microgrid Training and Certification, which prepares them to safely handle and diagnose modern energy storage systems and battery technologies.

According to project partner Bernie Kotlier, "[t]his funding is critical to developing the infrastructure for training thousands of California electricians and building a skilled workforce in the coming years that optimizes safety and performance. The project supports California's climate goals and provides industry-recognized certifications that competitively positions workers to access high-quality career jobs in their communities."

Learn more.

In Long Beach, local adults will have access to new urban forestry training opportunities supported by CAL FIRE's *Urban & Community Forestry Program.* Trainees will gain meaningful job experience in carbon sequestration practices by converting wood debris from hazardous trees throughout the city to lumber and other durable products, then planting 2,000 trees throughout the city's most disadvantaged neighborhoods, where most of the Corps members reside. The project will combine on-the-ground job training with outreach and community engagement to foster new partnerships and provide new pathways for careers in urban forestry professions.

Learn more.

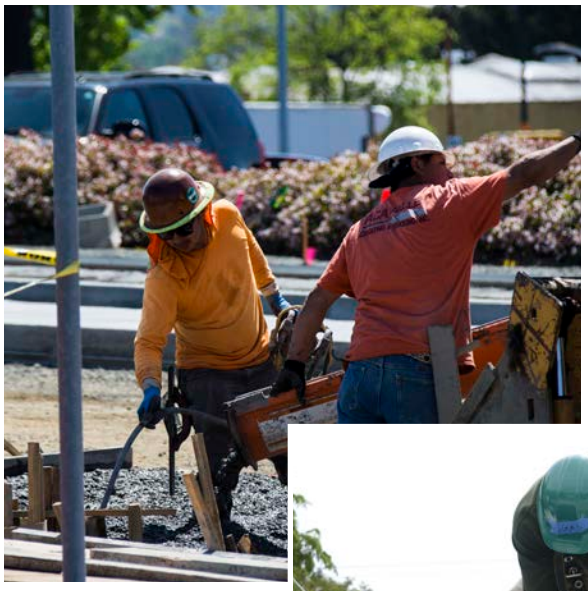
California Climate Investments projects reported supporting

14,500 JOBS

Employment Outcomes

While the modeled jobs presented in the previous section represent an estimate of the jobs supported by all California Climate Investments projects, administering agencies are encouraged to also report information on actual, recorded employment outcomes from awarded projects that provide jobs or job training.

Administering agencies are required to submit information, if available and consistent with confidentiality protections, for any awarded project that uses the *Jobs Training and Workforce Development benefit criteria table* to claim priority population benefits, or for any project where total project costs, including both GGRF and other funding sources, exceed $1,000,000. Nearly half of all California Climate Investments programs have projects that meet these criteria and report employment outcomes.



Cumulatively, for those projects that meet these criteria, agencies have reported that implemented projects have supported the equivalent of 14,500 full-time jobs. Additional information about employment outcomes resulting from individual California Climate Investments programs can be found on their respective *program pages*.

Many projects receive additional funding from other sources, in part leveraged by California Climate Investments funds. Therefore, employment outcomes reported by agencies include jobs supported by all funds associated with a given California Climate Investments project. As only a subset of programs and projects are required to submit employment outcomes information, totals presented here and in the *program pages* tend to understate the true employment outcomes achieved by California Climate Investments. Furthermore, reported employment outcomes do not include state administering agency staff and only track those jobs that are directly connected to investments.

Climate Investment Co-benefits

Beyond reducing GHG emissions and supporting jobs, California Climate Investments projects are supporting California's holistic approach to addressing the climate challenge by helping to reduce criteria air pollutant and toxic air contaminant emissions, construct affordable housing units near jobs and public transportation options, support increased resilience to climate impacts, improve public health, and more. Agencies continue to report these co-benefits, which support legislative priorities, state goals, and community benefits.

Building Regional Capacity and Resilience

California Climate Investments programs are implementing innovative strategies across sectors to achieve GHG emissions reductions and build climate resilience. The Greater San Diego County Resource Conservation District is using funding from the *Regional Forest and Fire Capacity* program to develop the region's capacity to restore the health of its forests and protect them from severe wildfires in the future. This project will deliver a variety of important additional benefits, including improved air and water quality, ecosystem services, increased resilience to climate impacts, and employment opportunities. The Greater San Diego County Resource

Conservation District is partnering with several Native American Tribes, the Cleveland National Forest, a private cattle company, and the Palomar Observatory to manage the region, which includes the last mixed conifer forest in San Diego County.

Learn more.

INVESTMENTS IN ACTION

Providing Multiple Benefits

The Solano Transportation Authority is reducing GHGs while linking underserved parts of the cities of Vallejo and Fairfield to employment, health, educational, and other facilities through faster, more efficient transit options. With funding from the California State Transportation Agency's *Transit and Intercity Rail Capital Program*, the project is prioritizing sites for transit improvements that will maximize mobility access while helping to improve quality of life.

Learn more.

Table 3 highlights several of the quantified outcomes expected over the life of projects implemented in 2021 alongside the cumulative lifetime benefits expected from all projects that have reported co- benefit data. CARB began quantifying and reporting these co benefits in recent years therefore, these expected outcomes should be considered the minimum as some programs may have several years of projects where these benefits were not assessed and reported.

Table 3: Reported 2021 Project Co-benefits

Co-benefit		Outcomes Expected from 2021 Investments	Outcomes Expected from Cumulative Investments
NO_x	Reduced oxides of nitrogen emissions	12,900 tons	48,400 tons
	Reduced diesel particulate matter emissions	610 tons	2,400 tons
$PM_{2.5}$	Reduced particulate matter 2.5 emissions	950 tons	4,100 tons
	Reduced reactive organic gas emissions	6,200 tons	17,600 tons
	Affordable housing created	1,595 units	8,939 units
	Land conserved or restored	86,600 acres	721,000 acres
	Waste diverted from landfills	127,200 tons	4.8 million tons
	Fuel use avoided	186 million gallons (gas and diesel)	705 million gallons (gas and diesel)
	Trees planted	3.9 million trees	15.1 million trees

Public Health Benefits

Many sources of GHG emissions in California also contribute to poor public health, particularly in communities with disproportionate pollution burdens. Air pollution from the production and use of fossil fuels contributes to high rates of asthma, cardiovascular disease, and other public health effects. Impacts from climate change like extreme heat, wildfire smoke, and drought-related water scarcity further contribute to negative public health outcomes. Across the board, climate impacts and other public health stressors are more likely to affect low-income and disadvantaged communities.

California Climate Investments projects are reducing emissions of air pollutants such as particulate matter, diesel particulate matter, and oxides of nitrogen. Less exposure to these air pollutants can provide health benefits, as well as cost benefits associated with avoided trips to the emergency room, fewer hospitalizations, or avoided premature mortality.

There are many health benefits from California Climate Investments programs, many of which are not quantified. Figure 3 displays the quantified health benefits from air pollutant emissions reductions. Heart and lung health co-benefits are estimated from reductions from all California Climate Investments projects, including on-road mobile, off-road mobile, and stationary sources in the transportation, energy, natural and working lands, and waste sectors.[26] The methods used to monetize the estimated health impacts are the same as those used by CARB for statutorily required economic impact analyses of proposed regulations.

Figure 3: Heart and Lung Health Co-benefits

696 avoided cases	**193** avoided cases	**324** avoided cases
Premature cardiopulmonary mortality incidences in adults 30+ years	Hospitalizations for cardiovascular and respiratory illness in adults 65+ years	Emergency room visits for respiratory illness and asthma
$6.98 B cost-benefit valuation	**$10.64 M** cost-benefit valuation	**$274,752** cost-benefit valuation

26 California Air Resources Board (2021). *Heart and Lung Health Co-benefit Assessment Methodology*.

INVESTMENTS IN ACTION

Demonstrating Clean Air Technologies

Supported by funding from CARB's *Zero-and Near Zero-Emission Freight Facilities Project*, the San Joaquin Valley Zero- and Near Zero-Emission Enabling Freight Project is piloting new technologies on locomotives and hybrid and zero-emission equipment around rail yards. As part of this project, a new battery-electric locomotive operated in coordination with two diesel locomotives completed eighteen round trips between Stockton and Barstow. This demonstration showed that it is possible for the locomotive to switch to zero-emission battery-electric power while passing through populated areas to reduce exposure to diesel emissions, then switch to diesel power in less populated areas to help recharge the batteries.

Learn more.

Benefits to Low-income Households

Some California Climate Investments programs direct benefits to communities by improving transit access and infrastructure, creating new affordable housing, or planting trees in public spaces. Other types of programs provide funding directly to individual households through electric vehicle vouchers and rebates, home solar and weatherization projects, home energy-efficiency projects, and more.

Programs that serve individual households often target low-income households statewide and report those benefits to CARB.

Cumulatively, 64,554 projects, or $310.3 million of implemented California Climate Investments are benefiting low-income households. *Individual program pages on the California Climate Investments website* summarize reported benefits to low-income households for programs that target individual consumers and households.[27] The information presented reflects the minimum amount of funding directly received by low-income households that were subject to income verification. Many other California Climate Investments programs also indirectly benefit low-income households by improving the sustainability, resilience, and livability of the communities in which they reside, or directly benefit low-income households but do not verify income information and therefore do not report those benefits to CARB.[28]

64,554 PROJECTS

or

$310.3 MILLION

in cumulative implemented California Climate Investments are benefiting low-income households

27 AB 1550 defines "low-income households" as those with: 1) a household income at or below 80 percent of the statewide median income, or 2) a household income at or below the threshold designated as low-income according to the department of Housing and Community Development State Income Limits. The low-income household definition applies to individual households and therefore it is not mapped. For programs that target investments to benefit low-income households for the purpose of meeting AB 1550 investment minimums, administering agencies must determine which approach to assess whether households meet the definition of low-income.

28 While California Climate Investments' priority populations include disadvantaged communities and low-income communities and households, administering agencies may only claim a benefit from one of these categories per project. A project that benefits a low-income household residing within a disadvantaged community may be claimed as benefiting a low-income household, or a disadvantaged community, but not both. The values presented here should not be added to values presented in other discussions of benefits to priority populations elsewhere in this report as doing so will result in double counting.

Benefiting Low-income Households

California Climate Investments programs are providing a range of benefits to low-income households – from clean energy and lower electricity bills to improved air quality and health outcomes.

In Santa Maria, People's Self-Help Housing is investing in the health and wellbeing of low-income farmworker households. With funds from the Department of Community Services and Development's *MultiFamily Energy Efficiency and Renewables* program, 65 farmworker families are finding immediate energy cost reductions and increased comfort after their town-homes were upgraded with energy efficiency features such as electric heat pump water heaters, smart thermostats, in-unit LED lighting, ventilation improvements, and duct sealing. The project will also install a 168-kilowatt solar photovoltaic system that will offset an estimated 83 percent of each household's energy use, further decreasing utility costs.

Learn more.

CARB's Woodsmoke Reduction program helps households that depend on an old, smoke generating wood stove for heat, particularly those in disadvantaged or low-income communities, purchase a new, cleaner burning wood stove or insert, pellet stove, natural gas heating device, or electric heating device.

Dennis and Deb were interested in reducing outdoor air pollution and improving the air quality inside their own home, where they burned about two cords of wood each winter in their 1979 woodstove insert. The availability of incentives was a significant factor in their choice to make the switch to a cleaner burning device. When asked how their new stove was working out, Deb responded, "[t]his stove really helped us out. We are caring for my elderly mother and being able to maintain steady heat that is not smoky for her has been wonderful." Their stove is one of 54 newly replaced stoves in Butte County through the Woodsmoke Reduction Program that are contributing to a reduction in emissions from GHGs, harmful particulates, and black carbon.

Learn more.

EXTENDING THE IMPACT OF FUNDING

Across jurisdictions, regions, industries, and more, California Climate Investments programs are making the most of public dollars to foster new collaborations, leveraging additional funding to expand their impact, and expanding access to programs through tailored outreach, engagement, and technical assistance.

Reaching Across California

California Climate Investments span all areas of the state. Each agency designs programs and selects projects, with many targeting certain populations or geographies. From Riverside to Oakland, San Diego County to Siskiyou County, California Climate Investments is undertaking coordinated action throughout the state to reduce GHG emissions and provide economic, social, and environmental benefits.

Figure 4 shows cumulative investments in each county. A more detailed breakdown of funding at various geographic scales and a map with an interactive display of the location of each implemented project is available on the *California Climate Investments Project Map*.

Figure 4: Geographic Analysis of Funding

Leveraging Funds

In addition to investing in projects that serve multiple geographies and promote collaboration on shared priorities, leveraged funds can help extend the impact of California Climate Investments by increasing the overall number and scale of individual projects. In 2021, $2.1 billion in implemented GGRF funds leveraged an additional $2.0 billion in funding. Cumulatively, $10.5 billion in implemented GGRF funds have leveraged an additional $20.5 billion from other sources, not including other funds leveraged for the High-Speed Rail Project. *Appendix C* provides more detail.

Leveraged funds is an important metric but securing match funding can be a barrier for communities that have limited access to additional funding sources. In some cases, California Climate Investments programs have responded to this issue by removing requirements for matching funds for projects that provide benefits to priority populations or allowing resource contributions in lieu of matching funds.

Demand for Funding

As awareness of and access to California Climate Investments improves, demand continues to exceed available funds. 2021 saw exceptionally high demand for funds for waste reduction, clean transportation, wildfire prevention, and urban greening.

Appendix D includes statistics on applications received compared to applications selected for funding in 2021 for each competitive program. Agencies are required to include basic information on their program websites about proposed and final funding decisions and are encouraged to post all project applications or proposals received, including those not selected for funding. This information can provide context for the competitiveness of project proposals and may help future applicants identify areas where they can strengthen their projects.

Increasing Access to California Climate Investments

Resources specifically focused on stakeholder and community engagement, community leadership, and sustaining meaningful partnerships can help ensure equitable and sustainable access to, and implementation of, climate efforts. Funding for community-focused outreach, capacity building, and technical assistance can help potential applicants, including those who are members of priority populations, access, and benefit from California Climate Investments.

Outreach and Engagement

Outreach and engagement activities are crucial to achieving priority populations investment minimums and overall equity goals for California Climate Investments. In recognition of this, administering agencies have continued to expand the awareness of funding, help priority populations access programs, and engage and support communities during the many stages of project design, development, and implementation.

Working with communities to provide tailored outreach and community engagement helps ensure that priority populations can access and benefit from California Climate Investments. The *California Climate Investments website*, social media channels (*Facebook* and *Twitter*), and *newsletters* are key outreach tools for building awareness of programs and funding opportunities, supporting interagency cooperation, and creating resources for diverse audiences.

INVESTMENTS IN ACTION

Leveraging Funds for Greater Impact

Through the Wildlife Conservation Board's ***Climate Adaptation and Resiliency Program,*** a coalition of federal, academic, nonprofit, and private organizations developed a tool to enhance climate adaptation and resilience planning in the Sacramento River watersheds. These watersheds provide the vast majority of California's utilized water and over 80 percent of the freshwater to the San Francisco Bay. By estimating the ecological returns of conservation and restoration efforts, the tool will help determine what future actions and investments would best restore and protect the health of this important region.

This project not only expanded the geographic reach of California Climate Investments, but it also extended the impact of funds by leveraging additional non-GGRF dollars. Fifty-seven percent of the total project cost is supported from complementary state programs and grants, with 43 percent, or $400,000 provided by California Climate Investments.

Learn more.

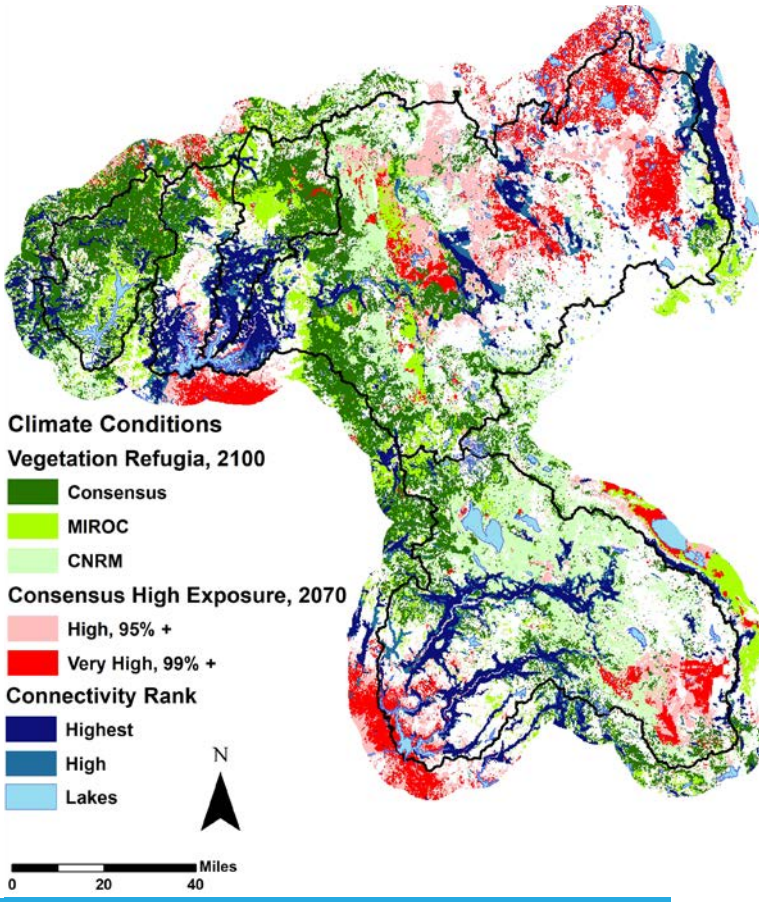


Figure 5: California Climate Investments Outreach in 2021

431 events

Over 21,900 participants

96% featuring remote participation

To make it easier to navigate the opportunities offered by California Climate Investments programs, administering agencies have continued to create resources designed for diverse audiences. In 2021, engagement opportunities such as virtual meetings, newsletters, public comment periods, and peer learning workshops were key venues to work with stakeholders to inform program development and increase knowledge of, and access to, California Climate Investments. Agencies provided materials and technical assistance, including through accessible documents, and translated materials.

In addition, California Climate Investments hosted a webinar series tailored to reach diverse stakeholder groups, such as land conservancies, nonprofits, local governments, transit agencies, businesses, farmers, and Tribal governments, from fall 2020 through summer 2021. The series reached over 400 participants in 2021 alone, with 60-70 percent of attendees having not previously applied to a California Climate Investments program.

INVESTMENTS IN ACTION

Innovative Partnerships Across California

California Climate Investments programs are working to build the capacity of communities to collaborate, participate, and advance shared objectives across counties, regions, and statewide. Through SGC's *Climate Change Research Program,* 18 Southern California Native American Tribes are working together to protect and conserve culturally significant plant species. This research will advance understanding of the impacts of climate change on a suite of native plant species that serve as the foundation of Southern California's biodiversity and are critical to Tribal culture, health, and well-being.

Learn more.

The Bay Area Air Quality Management District is collaborating with the California Department of Transportation, the Placer County Air Pollution Control District, and the Sacramento Metropolitan Air Quality Management District to improve air quality and reduce emissions from transit in communities disproportionately burdened by pollution and related health impacts such as asthma and respiratory illnesses. With funding from CARB's *Community Air Protection Incentives* program, the project will replace two passenger locomotives serving the Capitol Corridor from the Bay Area to Placer County with the cleanest available technology.

Learn more.

INVESTMENTS IN ACTION

Cultivating Community Climate Action

The Cool Blocks Try Transit project in Isla Vista combined outreach, engagement, research, and technical assistance to support GHG emissions reductions and produce additional opportunities for community climate action. With funding from the California Department of Transportation's *Low-Carbon Transit Operations Program,* the project brought together over 430 community members from a 25-block neighborhood to learn about strategies to promote carbon reduction, disaster resilience, clean transportation, and more. Following project workshops, community members developed and committed to individual action plans to reduce their carbon footprint. The project also inspired the community to create a successful grant application for the *Sustainable Transportation Equity Project.*

Learn more.

These webinars featured grantees and agency staff who shared pathways to success and resources available to help receive funding for projects.

Launched in June 2021, the *Community Connections tool* expands opportunities to access California Climate Investments funding by creating a directory that helps organizations and agencies across the state connect, raise awareness about their respective programs and work, identify new partners with complementary expertise, and build relationships with collaborators, particularly from priority populations, to potentially develop joint funding applications. Over 350 organizations and agencies across California have already signed up to be a part of Community Connections.

Since 2016, California Climate Investments has received critical support for outreach efforts through CARB's contract with the Foundation for California Community Colleges. As of August 2021, the Lee Andrews Group will continue to support much of the work started by the Foundation for California Community Colleges, including supporting the oversight of California Climate Investments' digital presence on social media, the *website*, and bimonthly newsletters. They will also take on new efforts, currently under development, to create and implement outreach strategies that more effectively welcome the participation of all Californians in California Climate Investments.

Technical Assistance and Capacity Building

Across the portfolio, agencies are increasingly providing technical assistance as a component of programs to level the playing field for applicants that may lack the capacity to successfully access California Climate Investments programs, particularly those that live in the state's most disadvantaged communities. For example, SGC's *Technical Assistance Program* helps agencies and organizations serving priority populations provide application support, implementation assistance, and capacity building activities to eligible applicants. SGC works closely with agencies to design technical assistance that is tailored to the needs of each program and its applicants, including providing funding for partner agencies to hire third-party technical assistance providers with expertise in each program's focus area.

Other agencies are also providing application assistance, partnership development, and capacity building activities to eligible applicants, enabling them to positively impact their communities. The California State Water Resources Control Board offers technical assistance to help small, disadvantaged communities access and implement funding for the *Safe and Affordable Drinking Water Fund* through such activities as engineering and environmental analysis, water audits, and operator training.

Building Community Capacity

To help ensure that programs are accessible to priority populations and that projects are responsive to community needs, California Climate Investments programs are increasingly providing funding for communities to engage in planning activities that are needed to successfully apply for future grants.

For example, the Big Pine Paiute Reservation, located next to the Eastern Sierra Nevada Mountains, has no sidewalks, bike lanes, or designated bus stops in the reservation. With funding from CARB's *Clean Mobility Options* program the Big Pine Paiute Tribe of the Owens Valley conducted a community-driven transportation needs assessment to help residents identify and decide how to address their transportation needs. The Big Pine Paiute Tribe can use this assessment to apply for additional funding from California Climate Investments or other transportation grant programs to implement clean mobility projects.

Learn more.

Building on the successes of past technical assistance and capacity building projects, SGC piloted the *Partners Advancing Climate Equity* program to help a cohort of 22 local leaders increase their community's capacity to address climate resilience and social equity priorities. Supported by funding from California Climate Investments and the U.S. EPA State Environmental Justice Cooperative Agreement Program,[29] the Partners Advancing Climate Equity program emphasizes peer-to-peer learning, forming cross-sector partnerships to enhance collective impact, building capacity to navigate the state's policy and funding landscapes, and developing actionable community needs assessments.

Learn more.

29 This funding program is helping to address the impacts of the COVID-19 pandemic on environmental justice communities by supporting development of innovative plans and processes for conducting effective outreach to underserved communities during social-distancing and local stay-at-home orders. *More information.*

Engage with California Climate Investments

Stay engaged with California Climate Investments throughout the year. Visit the *California Climate Investments website* to view the latest information about individual programs, projects, and California Climate Investments.

Follow California Climate Investments on social media to learn about funding opportunities, hear program updates,
and more:

- *@CAClimateInvest*
- *@CAClimateInvest*
- Subscribe to the *bimonthly newsletter* to stay up to date on opportunities to engage and provide comments, current news, and upcoming solicitations for California Climate Investments programs.
- *Public Events Calendar*: Learn about upcoming workshops, technical assistance events, and application deadlines.

Contact Us

1-800-757-2907 | *info@caclimateinvestments.ca.gov*

APPENDICES

Appendix A: 2021 Cumulative Outcomes

Appendix A includes cumulative summary statistics for each California Climate Investments subprogram, detailing funding status, intermediary administrative expenses, expected GHG emissions reductions, number of implemented projects, amount of funding benefiting priority populations, and more. Statistics are reported at the subprogram level. Each California Climate Investments agency administers programs, some of which allocate funds to subprograms. Reporting statistics at the subprogram level provides opportunity for greater transparency and detail across a wide variety of program and project types.

Additional summary statistics on every California Climate Investments program are also available on the *California Climate Investments website*.

Administering Agency	Subprogram	Cumulative Funding Status ($M)				Benefiting Priority Populations[30]		Implemented Projects		
		Allocated	Awarded[31]	Implemented	Intermediary Administrative Expenses ($M)[32]	($M)	%	GHG Reduction (1,000 $MTCO_2e$)	Cost per GHG ($/$MTCO_2e$)	Number of Projects
California Air Resources Board	AB 617 Implementation	$90.0	$40.0	$20.0	$20.0	TBD		–[33]	–	–
	Community Air Grants	$35.0	$15.0	$15.0	–	$13.6	91%	–[33]	–	56
	Community Air Protection Incentives	$964.0	$700.7	$422.2	$46.2	$339.2	90%	187	$2,255	2,281
	Fluorinated Gases Emission Reduction Incentives	$1.0	$1.0	$1.0	–	$0.0	0%	37	$27	15
	Funding Agricultural Replacement Measures for Emission Reductions	$419.1	$250.8	$233.3	$7.5	$161.6	72%	154	$1,516	5,814
	Advanced Technology Demonstration and Pilot Projects	$117.2	$117.2	$117.2	–	$117.2	100%	26	$4,466	14

30 For programs that contract with intermediaries to administer projects, costs incurred for administration are included in the total implemented funds but not included when calculating benefits to priority populations.

31 Per statute, some administering agencies may plan for future projects by selecting projects for funding in advance of receiving appropriations to fulfill those commitments. For this reason, in some instances "Awarded" funds may exceed "Allocated" funds. The High-Speed Rail Authority does not select or award funds, so this value represents implemented funds to date. The values reported for the High-Speed Rail Authority as "Awarded" also include "Implemented" funds.

32 Intermediary administrative expenses refer to funds provided to intermediaries (such as grantees, third-party administrators, or local agencies) that use part of the funding to cover the administrative costs associated with distributing incentives, implementing projects, or tracking and reporting data. Intermediary administrative expenses are reported as implemented when the final amount of the expense is known.

33 These programs do not have a quantified GHG emission benefit.

Administering Agency	Subprogram	Cumulative Funding Status ($M)				Benefiting Priority Populations[30]		Implemented Projects		
		Allocated	Awarded[31]	Implemented	Intermediary Administrative Expenses ($M)[32]	($M)	%	GHG Reduction (1,000 $MTCO_2e$)	Cost per GHG ($/$MTCO_2e$)	Number of Projects
California Air Resources Board (cont.)	Agricultural Worker Vanpools	$6.0	$6.0	$6.0	–	$6.0	100%	7	$842	1
	Clean Cars 4 All	$177.0	$127.0	$89.7	$6.3	$81.3	97%	80	$1,122	11,338
	Clean Mobility in Schools Project	$34.6	$24.6	$24.6	–	$24.6	100%	10	$2,453	3
	Clean Mobility Options	$55.2	$55.1	$30.3	–	$29.3	97%	3	$9,367	51
	Clean Off-Road Equipment Voucher Incentive Project	$44.2	$44.2	$31.1	$2.3	$22.9	79%	19	$1,605	228
	Clean Truck & Bus Voucher (HVIP)	$486.4	$475.3	$271.7	$6.5	$168.1	63%	1,112	$244	4,298
	Clean Vehicle Rebate Project	$995.1	$995.1	$974.0	$15.3	$313.8	33%	6,703	$145	404,937
	Financing Assistance for Lower-Income Consumers	$41.9	$41.9	$20.5	$1.1	$16.1	83%	23	$879	3,522
	Outreach, Education, and Awareness	$6.0	$6.0	$6.0	–	$6.0	100%	–[33]	–	1
	Rural School Bus Pilot Projects	$61.6	$61.6	$48.8	$0.3	$29.9	62%	45	$1,092	161
	Sustainable Transportation Equity Project	$19.5	$19.5	$19.5	–	$19.5	100%	4	$5,047	11
	Zero- and Near Zero-Emission Freight Facilities	$148.7	$148.7	$148.7	–	$148.7	100%	50	$2,997	10
	Zero-Emission Truck and Bus Pilot Projects	$85.0	$82.8	$82.8	–	$64.5	78%	107	$778	9
	Prescribed Fire and Smoke Monitoring	$7.2	$3.9	$3.9	–	$0	0%	–[33]	–	51
	Woodsmoke Reduction	$13.0	$8.5	$7.5	$0.8	$5.8	86%	108	$70	2,188
California Coastal Commission	Coastal Resilience Planning	$5.3	$2.1	$2.1	–	$1.1	54%	–[33]	–	16

Administering Agency	Subprogram	Cumulative Funding Status ($M)				Benefiting Priority Populations[30]		Implemented Projects		
		Allocated	Awarded[31]	Implemented	Intermediary Administrative Expenses ($M)[32]	($M)	%	GHG Reduction (1,000 $MTCO_2e$)	Cost per GHG ($/$MTCO_2e$)	Number of Projects
California Conservation Corps	Training and Workforce Development Program	$71.1	$27.6	$27.6	–	$22.8	83%	253	$109	461
California Department of Community Services and Development	Community Solar	$2.2	$2.0	$2.0	–	$2.0	100%	10	$204	1
	Farmworker Housing Single-Family Energy Efficiency and Solar Photovoltaics	$12.4	$12.4	$12.0	$1.8	$10.0	97%	17	$722	758
	Multi-Family Energy Efficiency and Renewables	$78.9	$63.9	$42.6	$3.6	$39.0	100%	180	$236	8,705
	Single-Family Energy Efficiency and Solar Photovoltaics	$70.0	$70.0	$70.0	$9.3	$60.7	100%	216	$324	16,146
	Single-Family Solar Photovoltaics	$51.0	$51.0	$51.0	$6.8	$44.2	100%	134	$382	3,160
California Department of Fish and Wildlife	Wetlands and Watershed Restoration Program	$46.7	$36.9	$36.9	–	$20.5	55%	1,000	$37	22
California Department of Food and Agriculture	Alternative Manure Management Program	$289.1	$68.4	$68.4	$0.1	$7.4	11%	1,108	$62	116
	Dairy Digester Research and Development Program		$195.3	$195.3	–	$130.1	67%	21,007	$9	118
	Healthy Soils Program	$65.5	$33.8	$33.8	$0.1	$12.1	36%	286	$118	470
	Renewable and Alternative Fuels	$3.0	$3.0	$3.0	–	$0.0	0%	–[33]	–	1
	Technical Assistance Program[34]	$4.4	$4.4	$4.4	–	$2.4	54%	–[33]	–	74
	State Water Efficiency and Enhancement Program	$63.1	$61.8	$61.8	$0.5	$22.7	37%	744	$83	598

34 The CDFA Technical Assistance Program is jointly administered and funded by CDFA and SGC.

Administering Agency	Subprogram	Cumulative Funding Status ($M)				Benefiting Priority Populations[30]		Implemented Projects		
		Allocated	Awarded[31]	Implemented	Intermediary Administrative Expenses ($M)[32]	($M)	%	GHG Reduction (1,000 $MTCO_2e$)	Cost per GHG ($/$MTCO_2e$)	Number of Projects
California Department of Forestry and Fire Protection	Community Fire Planning and Preparedness	$10.0	$7.5	$1.5	–	$0.2	17%	–[33]	–	3
	Fire Prevention Program	$357.8	$205.5	$205.5	–	$139.8	68%	–[33]	–	111
	Forest Carbon Plan Implementation	$129.5	$59.4	$59.4	–	$8.9	15%	–[33]	–	180
	Fire Prevention Grants Program	$861.1	$177.0	$177.0	–	$59.5	34%	–[33]	–	262
	Forest Health Program		$382.1	$382.1	–	$143.2	37%	14,431	$26	203
	Forest Health Research	$8.4	$8.4	$8.4	–	$2.5	29%	–[33]	-	38
	Urban and Community Forestry Program	$77.8	$74.8	$74.8	–	$71.6	96%	479	$156	115
California Department of Resources Recycling and Recovery	Community Composting for Green Spaces Grant	$1.5	$1.5	$0.6	–	$0.4	69%	2	$423	77
	Food Waste Prevention and Rescue Grants	$24.1	$23.7	$23.7	–	$22.9	97%	569	$42	76
	Organics and Recycling Manufacturing Loans	$9.2	$7.7	$7.7	–	$0.8	11%	772	$10	5
	Organics Grants	$75.4	$69.5	$69.5	–	$54.0	78%	1,305	$53	28
	Recycled Fiber, Plastic, and Glass Grants	$36.5	$33.5	$33.5	–	$24.8	74%	642	$52	16
	Reuse Grant Program	$2.0	$2.0	$2.0	–	$1.5	75%	1	$3,613	4
	SB 1383 Local Assistance Grants	$60.0	New Program in FY 2021-22							
California Department of Transportation	Active Transportation Program	$10.0	$10.0	$10.0	–	$10.0	100%	<1	$163,934	3
	Low-Carbon Transit Operations Program	$805.7	$636.4	$636.4	–	$609.0	96%	6,291	$101	813
California Department of Water Resources	State Water Project Turbines	$20.0	$20.0	$20.0	–	$0.0	0%	37	$542	2
	Water-Energy Grant Program	$48.3	$45.3	$37.0	$0.3	$23.1	63%	385	$96	95,359

Administering Agency	Subprogram	Cumulative Funding Status ($M)				Benefiting Priority Populations[30]		Implemented Projects		
		Allocated	Awarded[31]	Implemented	Intermediary Administrative Expenses ($M)[32]	($M)	%	GHG Reduction (1,000 $MTCO_2e$)	Cost per GHG ($/$MTCO_2e$)	Number of Projects
California Energy Commission	Food Production Investment Program	$124.0	$115.3	$115.3	–	$94.9	82%	2,905	$40	50
	Low-Carbon Fuel Production	$12.5	$12.5	$12.5	–	$11.7	94%	452	$28	4
	Renewable Energy for Agriculture Program	$10.0	$9.5	$9.5	–	$1.4	15%	127	$75	45
California Environmental Protection Agency	Transition to a Carbon-Neutral Economy	$2.6	$2.6	$2.6	–	$0.0	0%	–[33]	–	2
California Governor's Office of Emergency Services	Fire Engines and Maintenance	$28.5	$26.5	$26.5	–	$0.0	0%	–[33]	–	2
	Wildfire Response and Readiness*	$3.8	$4.6	$4.6	–	$0.0	0%	–[33]	–	61
California High-Speed Rail Authority	High-Speed Rail Project	$4,568.8	$2,978.4	$2,978.4	–	TBD		–[35]	–[36]	1
California Natural Resources Agency	Regional Forest and Fire Capacity	$20.0	$18.4	$6.1	$0.2	$2.2	38%	–[33]	–	31
	Urban Greening Program	$156.5	$139.9	$139.9	–	$132.3	95%	54	$2,584	91
California State Coastal Conservancy	Climate Ready Program	$7.0	$6.7	$6.7	–	$4.1	62%	4	$1,521	18
California State Transportation Agency	Transit and Intercity Rail Capital Program	$1,723.1	$2,190.8	$556.1	–	$511.6	92%	4,156	$134	38

35 Estimated GHG emissions reductions from the California High-Speed Rail project are 102 $MMTCO_2e$ over its first 50 years of operating life, as detailed in the *2021 California High-Speed Rail Sustainability Report*.

36 Though GGRF funds provide a critical part of the total funds for the system, it is difficult to estimate precisely what the ultimate GGRF investment will be, and consequently, a comparable "GGRF investment per ton of GHG reduced" metric is not able to be calculated.

* Pending additional information on expenditures.

Administering Agency	Subprogram	Cumulative Funding Status ($M)				Benefiting Priority Populations[30]		Implemented Projects		
		Allocated	Awarded[31]	Implemented	Intermediary Administrative Expenses ($M)[32]	($M)	%	GHG Reduction (1,000 $MTCO_2e$)	Cost per GHG ($/$MTCO_2e$)	Number of Projects
California State Water Resources Control Board	Safe and Affordable Drinking Water Fund	$349.0	$141.1	$81.4	–	$79.9	98%	<0	–	35
California Strategic Growth Council	Affordable Housing and Sustainable Communities Program	$3,047.9	$1,228.1	$1,228.1	$3.2	$1,006.4	82%	2,347	$523	107
	Sustainable Agricultural Lands Conservation Program	$212.7	$193.0	$68.2	–	$4.3	6%	6,727	$10	63
	Climate Change Research Program	$36.5	$32.3	$32.3	–	$0.0	0%	–[33]	–	20
	Technical Assistance Program	$12.7	$9.9	$8.0	–	$6.6	83%	–[33]	–	30
	Transformative Climate Communities Program	$241.3	$227.8	$207.8	$2.9	$192.6	94%	150	$1,389	203
California Wildlife Conservation Board	Climate Adaptation and Resiliency Program	$20.0	$14.5	$14.5	–	$5.9	41%	506	$29	27
California Workforce Development Board	Low-Carbon Economy Workforce	$38.7	$24.4	$24.4	–	$5.7	23%	–[33]	–	30
San Francisco Bay Conservation and Development Commission	Climate Change Adaptation and Coastal Resilience Planning	$6.5	$2.5	$2.5	–	$0.0	0%	–[33]	–	24
Total		**$17,729.5**	**$13,000.7**	**$10,459.5**	**$135.1**	**$5,174.8**	**50%**	**75,969.6**	**–**	**563,812**

Appendix B: Cumulative Budgetary Expenditures

Appendix B includes information on cumulative budgetary expenditures by program including breakdowns along budget categories. While administering agencies report expenditures related to projects and third-party administration in the California Climate Investments Reporting and Tracking System, fiscal reporting on budgetary expenditures also includes expenditures related to program administration.

Administering Agency	Program	Appropriations[37] ($M)	State Ops ($M)	Local Assistance ($M)	Capital Outlay ($M)	Cumulative Budgetary Expenditures ($M)	Cumulative Program Administration Costs[38] ($M)
California Air Resources Board	Community Air Protection; Fluorinated Gases Emission Reduction; Funding Agricultural Replacement Measures for Emission Reductions; Low-Carbon Transportation; Prescribed Fire Smoke Monitoring; Woodsmoke Reduction; Program Administration	$4,362.5	$219.1	$3,212.2	$0.0	$3,431.3	$92.9
California Coastal Commission*	Coastal Resilience Planning	$5.3	$1.1	$3.7	$0.0	$4.8	$0.2
California Conservation Corps	Training and Workforce Development	$71.1	$34.3	$0.0	$0.0	$34.3	$0.8
California Department of Community Services and Development	Low-Income Weatherization	$226.7	$11.6	$204.2	$0.0	$215.9	$11.6
California Department of Fish and Wildlife*	Wetlands and Watershed Restoration	$46.7	$5.2	$29.8	$0.0	$35.0	$5.6
California Department of Food and Agriculture	Dairy Methane; Healthy Soils; Renewable and Alternative Fuels; State Water Efficiency and Enhancement	$420.6	$88.1	$319.3	$0.0	$407.4	$18.6
California Department of Forestry and Fire Protection*	Community Fire Planning and Preparedness; Fire Prevention Program; Forest Carbon Plan Implementation; Sustainable Forests	$1,471.3	$835.3	$21.3	$0.0	$856.6	$12.1

37 Certain administering agencies have provisional language allowing for the transfer of appropriated funds to other state agencies to implement California Climate Investments programs.

38 Administrative expenditures include costs incurred directly by administering agencies for program implementation. Some programs use an intermediary (e.g., third-party contractor, regional administrator) to implement programs. Costs incurred by intermediaries are reported as implemented projects and included in the reported implemented funds.

* Denotes agencies which had difficulties closing in FI$Cal and, as such, provided estimated budgetary expenditures.

Administering Agency	Program	Appropriations[37] ($M)	State Ops ($M)	Local Assistance ($M)	Capital Outlay ($M)	Cumulative Budgetary Expenditures ($M)	Cumulative Program Administration Costs[38] ($M)
California Department of Resources Recycling and Recovery	Waste Diversion	$269.4	$15.2	$129.8	$0.0	$145.0	$5.2
California Department of Transportation	Active Transportation Program; Low-Carbon Transit Operations Program	$815.7	$0.0	$533.3	$0.0	$533.3	$0.0
California Department of Water Resources	State Water Project Turbines; Water-Energy Grant	$68.3	$2.8	$39.5	$20.0	$62.3	$2.8
California Energy Commission	Food Protection Investment; Low-Carbon Fuel Production; Renewable Energy for Agriculture Program	$146.5	$16.5	$125.0	$0.0	$141.4	$3.8
California Environmental Protection Agency	Transition to a Carbon-Neutral Economy	$2.6	$2.6	$0.0	$0.0	$2.6	$0.0
California Governor's Office of Emergency Services	Wildfire Response and Readiness	$32.2	$27.1	$3.8	$0.0	$30.9	$27.1
California High-Speed Rail Authority	High-Speed Rail Project	$4,568.8	$0.0	$0.0	$2,978.4	$2,978.4	$0.0
California Natural Resources Agency	Regional Forest and Fire Capacity; Urban Greening Program	$176.5	$0.9	$169.2	$0.0	$170.1	$2.5
California State Coastal Conservancy	Climate Ready Program	$7.0	$0.3	$6.7	$0.0	$7.0	$0.3
California State Transportation Agency	Transit and Intercity Rail Capital Program	$1,723.1	$5.1	$1,198.0	$0.0	$1,203.2	$5.1
California State Water Resources Control Board*	Safe and Affordable Drinking Water Fund	$349.0	$0.0	$99.5	$0.0	$99.5	$0.0
California Strategic Growth Council*	Affordable Housing and Sustainable Communities Program; Climate Change Research; Technical Assistance Program; Transformative Climate Communities Program	$3,551.1	$79.7	$2,055.5	$0.0	$2,135.2	$76.1
California Wildlife Conservation Board	Climate Adaptation and Resiliency Program	$20.0	$0.0	$14.2	$0.0	$14.2	$0.0

Administering Agency	Program	Appropriations[37] ($M)	State Ops ($M)	Local Assistance ($M)	Capital Outlay ($M)	Cumulative Budgetary Expenditures ($M)	Cumulative Program Administration Costs[38] ($M)
California Workforce Development Board	Low-Carbon Economy Workforce	$38.7	$4.2	$25.1	$0.0	$29.3	$3.8
San Francisco Bay Conservation and Development Commission*	Climate Change Adaptation and Coastal Resilience Planning	$6.5	$4.8	$0.5	$0.0	$5.3	$0.8
Totals for Program		**$18,379.6**	**$1,353.9**	**$8,190.6**	**$2,998.4**	**$12,542.9**	**$269.4**
California Air Resources Board	Statewide Administration	$72.2	$64.4	$0.0	$0.0	$64.4	$64.4
Fund Controller Agencies	Controller's Fees and Adjustments	$73.3	$73.3	$0.0	$0.0	$73.3	$73.3
Office of Environmental Health and Hazard Assessment*	Identification of Disadvantaged Communities	$8.6	$7.2	$0.0	$0.0	$7.2	$7.2
Other	Pension Payments	$0.0	$2.8	$0.0	$0.0	$2.8	$2.8
Totals for Programs Including Administration and Support		**$18,533.8**	**$1,498.8**	**$8,190.6**	**$2,998.4**	**$12,687.8**	**$414.3**

Appendix C: Cumulative California Climate Investments Leveraged Funds

Many California Climate Investments programs extend the reach of their appropriations by requiring or encouraging applicants to secure additional support from federal, state, local, or private sources. Appendix C details cumulative reported leveraged funds by subprogram across the suite of California Climate Investments. Programs that do not leverage funds or have not reported leveraged funds to CARB have been excluded. While the High-Speed Rail Project leverages a large amount of funding, because the final GGRF investment and final project cost are unknown, the High-Speed Rail Project is not included in the totals shown at the bottom of this table. Other programs shown in this table are leveraging, on average, an additional $3.30 from other sources for each GGRF dollar invested.

Administering Agency	Subprogram	Total GGRF Implemented ($M)	Total Project Cost ($M)	Funds from Additional Sources ($M)	Leveraged Ratio (Funds from Additional Sources/ GGRF Implemented)
California Air Resources Board	Community Air Grants	$15.0	$17.0	$1.9	0.1
	Community Air Protection Incentives	$422.2	$792.0	$369.7	0.9
	Funding Agricultural Replacement Measures for Emission Reductions	$233.3	$504.6	$271.3	1.2
	Advanced Technology Demonstration and Pilot Projects	$117.2	$269.2	$152.0	1.3
	Agricultural Worker Vanpools in San Joaquin Valley	$6.0	$7.5	$1.5	0.3
	Clean Cars 4 All	$89.7	$93.3	$3.6	0.0
	Clean Mobility in Schools Project	$24.6	$24.8	$0.2	0.0
	Clean Mobility Options	$30.3	$36.7	$6.4	0.2
	Clean Off-road Equipment Voucher Incentive Project	$31.1	$48.3	$17.2	0.6
	Clean Truck & Bus Vouchers (HVIP)	$271.7	$1,004.4	$732.6	2.7
	Clean Vehicle Rebate Project	$974.0	$3,454.5	$2,480.5	2.5
	Outreach, Education, and Awareness	$6.0	$11.0	$5.0	0.8
	Rural School Bus Pilot Project	$48.8	$51.1	$2.3	0.0
	Sustainable Transportation Equity Project	$19.5	$43.3	$23.8	1.2
	Zero- and Near Zero-emission Freight Facilities	$148.7	$403.4	$254.7	1.7
	Zero-emission Truck and Bus Pilot Projects	$82.8	$143.9	$61.1	0.7
	Prescribed Fire and Smoke Monitoring	$3.9	$4.0	$0.1	0.0
	Woodsmoke Reduction	$7.5	$11.5	$3.9	0.5

Administering Agency	Subprogram	Total GGRF Implemented ($M)	Total Project Cost ($M)	Funds from Additional Sources ($M)	Leveraged Ratio (Funds from Additional Sources/ GGRF Implemented)
California Coastal Commission	Coastal Resilience Planning	$2.1	$5.5	$3.5	1.7
California Department of Community Services and Development	Multi-Family Energy Efficiency and Renewables	$42.6	$81.9	$39.3	0.9
	Single-Family Energy Efficiency and Solar PV	$70.0	$89.4	$19.4	0.3
	Single-Family Solar Photovoltaics	$51.0	$71.6	$20.7	0.4
California Department of Fish and Wildlife	Wetlands & Watershed Restoration Program	$36.9	$85.8	$48.9	1.3
California Department of Food and Agriculture	Alternative Manure Management Program	$68.4	$78.8	$10.4	0.2
	Dairy Digester Research and Development Program	$195.3	$591.9	$396.6	2.0
	Healthy Soils Program	$33.8	$44.0	$10.2	0.3
	State Water Efficiency and Enhancement Program	$61.8	$99.8	$38.0	0.6
	Technical Assistance Program	$4.4	$7.2	$2.8	0.6
California Department of Forestry and Fire Protection	Fire Prevention Program	$205.5	$218.7	$13.2	0.1
	Forest Health Research	$8.4	$12.7	$4.3	0.5
	Forest Health Program	$382.1	$611.9	$229.7	0.6
	Urban and Community Forestry Program	$74.8	$107.8	$33.0	0.4
California Department of Resources Recycling and Recovery	Food Waste Prevention and Rescue Grants	$23.7	$40.9	$17.2	0.7
	Organics and Recycling Manufacturing Loans	$7.7	$139.2	$131.5	17.0
	Organics Grants	$69.5	$333.2	$263.7	3.8
	Recycled Fiber, Plastic, and Glass Grants	$33.5	$130.7	$97.2	2.9
	Reuse Grant Program	$2.0	$2.2	$0.2	0.1
California Department of Transportation	Active Transportation Program	$10.0	$16.3	$6.3	0.6
	Low-Carbon Transit Operations Program	$636.4	$7,761.4	$7,125.1	11.2
California Department of Water Resources	State Water Project: Turbines	$20.0	$43.1	$23.1	1.2
	Water-Energy Grant Program	$37.0	$41.8	$4.8	0.1

Administering Agency	Subprogram	Total GGRF Implemented ($M)	Total Project Cost ($M)	Funds from Additional Sources ($M)	Leveraged Ratio (Funds from Additional Sources/ GGRF Implemented)
California Energy Commission	Food Production Investment Program	$115.3	$175.4	$60.1	0.5
	Low-Carbon Fuel Production	$12.5	$33.9	$21.4	1.7
	Renewable Energy for Agriculture Program	$9.5	$14.9	$5.4	0.6
California High-Speed Rail Authority	High-Speed Rail Project	$2,978.4	$83,084.5	$80,106.1	26.9
California Natural Resources Agency	Regional Forest and Fire Capacity	$6.1	$7.8	$1.7	0.3
	Urban Greening Program	$139.9	$265.5	$125.6	0.9
California State Coastal Conservancy	Climate Ready Program	$6.7	$10.2	$3.5	0.5
California State Transportation Agency	Transit and Intercity Rail Capital Program	$556.1	$6,156.7	$5,600.6	10.1
California State Water Resources Control Board	Safe and Affordable Drinking Water Fund	$81.4	$103.4	$22.0	0.3
California Strategic Growth Council	Affordable Housing and Sustainable Communities Program	$1,228.1	$5,547.8	$4,319.7	3.5
	Sustainable Agricultural Lands Conservation Program	$68.2	$116.0	$47.8	0.7
	Climate Change Research Program	$32.3	$33.6	$1.3	0.0
	Technical Assistance Program	$8.0	$8.3	$0.2	0.0
	Transformative Climate Communities Program	$207.8	$505.5	$297.8	1.4
California Wildlife Conservation Board	Climate Adaptation and Resiliency Program	$14.5	$34.6	$20.2	1.4
California Workforce Development Board	Low-Carbon Economy Workforce	$24.4	$41.4	$17.0	0.7
Total		**$7,120.2**	**$30,591.4**	**$23,471.2**	**3.3**

Appendix D: 2021 Statistics on Competitive Project Proposals Received

Appendix D includes statistics on the applications received compared to the applications selected for funding in 2021 for each California Climate Investments program that undergoes a competitive application or solicitation process. In some cases, the number of proposals represents the demand for projects, while in other cases the number represents the demand for program administration.

Administering Agency	Program	Type of Award Recipient(s)	Response to Solicitation				Percent of Selected Funds Requested
			Proposals Received		Proposals Selected		
			Number	Amount Requested	Number	Amount Awarded	
California Air Resources Board	Advanced Technology Demonstration and Pilot Projects	Awarded Directly to Recipient	3	$25,602,600	1	$10,000,000	256%
	Fluorinated Gases Emission Reduction Incentive Program	Awarded Directly to Recipient	18	$1,285,500	15	$1,000,000	129%
	Sustainable Transportation Equity Project	Awarded Directly to Recipient	34	$108,953,997	11	$19,500,000	559%
California Department of Food and Agriculture	Technical Assistance Program	Awarded Directly to Recipient	74	$3,212,110	69	$2,966,913	108%
California Department of Forestry and Fire Protection	Fire Prevention Grant Program	Awarded Directly to Recipient	307	$349,361,542	40	$50,000,000	699%
	Forest Health Program	Awarded Directly to Recipient	73	$317,470,397	14	$64,317,000	494%
California Department of Resources Recycling and Recovery	Food Waste Prevention and Rescue Grants	Awarded Directly to Recipient	32	$9,307,746	12	$3,496,341	266%
	Recycled Fiber, Plastic, and Glass Grant Program	Awarded Directly to Recipient	9	$16,317,827	6	$10,791,009	151%
	Reuse Grant Program	Awarded Directly to Recipient	32	$14,267,287	4	$1,983,435	719%
California Energy Commission	Food Production Investment Program	Awarded Directly to Recipient	8	$8,931,934	7	$8,782,876	102%
California Natural Resources Agency	Urban Greening Program	Awarded Directly to Recipient	76	$123,433,582	25	$28,500,000	433%
California Strategic Growth Council	Technical Assistance Program	Awarded Directly to Recipient	5	$2,470,226	1	$499,927	494%
	Sustainable Agricultural Lands Conservation Program	Awarded Directly to Recipient	88	$193,242,931	54	$118,035,534	164%
California Workforce Development Board	Low-Carbon Economy Workforce	Awarded Directly to Recipient	35	$31,377,372	19	$14,530,266	216%

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