



Annual Report to the Legislature on

# California Climate Investments Using Cap-and-Trade Auction Proceeds





April 2021



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# EXECUTIVE SUMMARY

California continues to experience destructive effects from the ongoing climate crisis, with 2020 setting new records for heat and acreage lost to wildfires. Californians across the state faced extended periods of unhealthy air quality associated with wildfire smoke. In many cases, low-income communities and communities facing disproportionate environmental burdens are particularly vulnerable to extreme climate events and may lack adequate resources to prepare, respond, or recover. The COVID-19 pandemic further compounded these challenges, causing tragic loss of life and unprecedented economic disruption with disparate impacts along racial and socioeconomic lines. As California looks towards rebuilding from these crises towards a more just and sustainable future, California Climate Investments can play an important role by investing in projects that accelerate progress towards deep decarbonization and carbon neutrality while supporting a climate-conscious, equitable, and resilient recovery.

This document, the 2021 Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds, is a key resource for tracking progress on the implementation of California Climate Investments programs. In addition to fiscal information, greenhouse gas reductions, benefits to priority populations, and co-benefits, this report describes the latest programmatic developments, efforts in outreach and technical assistance, and

#### **CUMULATIVE OUTCOMES**

\$8.3 billion in implemented projects



50% of funding benefiting priority populations (\$4 billion+)



488,000+ individual projects implemented



7,200+ affordable housing units under contract



133,000 urban tree plantings



700+ transit agency projects funded, adding or expanding transit service



123,000+ projects installing energy efficiency measures in homes



330,000+ rebates issued for zeroemission and plug-in hybrid vehicles project outcomes from 2020. This report also features individual program pages that give statistics and details from individual programs, as well as project profiles that describe individual projects in detail. Additional information about California Climate Investments can be found in the appendices and at caclimateinvestments.ca.gov.

# Outcomes from 2020

Despite challenges associated with remote work and uncertain economic conditions, state agencies that administer California Climate Investments programs continued to implement projects, investing over \$3.1 billion in over 51,000 projects in 2020, including nearly \$1.4 billion that the California High-Speed Rail Authority has implemented. These dollars are funding programs that support reduced air pollution through community emissions reduction programs and incentives for cleaner vehicles and equipment, increase mobility through transit projects and transit-oriented affordable housing, and ensure safe, accessible, and affordable drinking water. California Climate Investments programs also contribute to restoring and protecting cherished forests, vital watersheds, crucial habitat for biodiversity, world-class agricultural lands, and indispensable urban forests, all of which provide Californians the clean water, healthy air, nutritious food,

Modeled Jobs Reported in 2020 (full-time equivalents)

84,000+ Directly Supported Jobs

37,000+ Indirectly Supported Jobs

49,000+ Induced Jobs

For additional information on modeled jobs, including definitions of terms, visit arb.ca.gov/resources/ documents/cci-methodologies.

and opportunities for recreation they rely on. In 2020, California Climate Investments programs have implemented projects that are expected to reduce almost 18 million metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) over project lifetimes. Cumulatively, investments reported as implemented since the inception of California Climate Investments are expected to reduce 66 million metric tons of carbon dioxide equivalent over project lifetimes, in addition to expected greenhouse gas emission reductions attributable to the High-Speed Rail Project.

### **Funding Benefiting Priority Populations**

Cumulatively, 50 percent, or just over \$4.0 billion, in implemented California Climate Investments project dollars has benefited priority populations, as shown in Figure 1.<sup>1,2</sup>

<sup>1</sup> Third party intermediary administrative expenses in the amount of \$126.9 million are excluded from the denominator for the purposes of this calculation. Throughout this report, priority population calculations reflect project dollars only.

<sup>2</sup> For additional discussion of priority population benefits see page 21.



Statute requires that a minimum of 35 percent of project dollars reach priority populations, which include disadvantaged communities and low-income communities and households across the state.<sup>3</sup> Senate Bill (SB) 535 (Chapter 830, Statutes of 2012) set minimum investments for projects that benefit disadvantaged communities and projects that are located within disadvantaged communities. In 2016, AB 1550 (Chapter 369, Statutes of 2016) amended the investment minimums for disadvantaged communities created by SB 535 to require that a minimum percentage of projects be located within and provide a benefit to disadvantaged communities. AB 1550 also established new investment minimums for low-income communities and low-income households. To date, California Climate Investments is meeting and exceeding these minimum levels, as shown by Figure 2.

<sup>3</sup> CalEPA defines disadvantaged communities as the top 25 percent of communities experiencing disproportionate amounts of pollution, environmental degradation, and socioeconomic and public health conditions according to the Office of Environmental Health Hazard Assessment's CalEnviroScreen tool, along with other areas with high amounts of pollution and low populations. Low income communities and households are those with incomes either at or below 80 percent of the statewide median or below a threshold designated as low income by the Department of Housing and Community Development.

#### Figure 2: Cumulative Investments Contributing to Statutory Investment Minimums



Cumulatively, over 65 percent of project dollars implemented under AB 1550 have reached priority populations, including 41 percent to disadvantaged communities, 22 percent to low-income communities and households, and 5 percent to low-income communities and households within a half-mile of disadvantaged communities. Collectively, these investments greatly exceed the statutory minimums.

#### **Delivering Co-Benefits**

In addition to reducing greenhouse gases and ensuring a substantial portion of project dollars go to projects that benefit priority populations, California Climate Investments also provide important co-benefits that protect and improve community health by reducing pollution, save individuals money by reducing energy and transportation costs, increase the number of shade-providing trees, and improve the livability of communities by increasing walkability and access to clean transportation options and job centers. To date, California Climate Investments projects have funded the planting of over 133,000 urban trees, reduced criteria air pollutants by over 60,000 tons, added over 7,200 new affordable housing units, and saved Californians almost \$93 million through water energy-efficiency projects.

Since CARB began collecting this data in 2017, 46,012 full-time equivalent jobs have been reported as funded by California Climate Investments projects.

This figure does not include positions held by state administering agency staff.



# INTRODUCTION

California Climate Investments is a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment. The broad portfolio of projects touches virtually every sector of the economy and spans across California, with an emphasis on disadvantaged and low-income communities.

This report describes the status and outcomes of California Climate Investments, which are funded by Cap-and-Trade Auction Proceeds that are deposited into the Greenhouse Gas Reduction Fund (GGRF). The Legislature appropriates money from the GGRF to agencies to administer California Climate Investments programs that facilitate greenhouse gas emission reductions and provide additional economic, environmental, and public health benefits, consistent with existing legislative requirements.<sup>4</sup> Five agencies receive 65 percent of the proceeds from each quarterly Cap-and-Trade auction through continuous appropriations.<sup>5</sup> Additional legislation identifies other transfers and obligations from the GGRF, including a transfer to offset a suspended manufacturing tax and use fee and replacement of a fire prevention fee in State Responsibility Areas.<sup>6</sup> The Legislature appropriates remaining available funds through the annual budget process. For additional background information on the Cap-and-Trade program and California Climate Investments, see Appendix A.

As California continues its efforts to respond to and recover from the COVID-19 pandemic, there are opportunities for California Climate Investments to play an important role and help achieve interconnected climate, public health, equity, and economic goals. Many California Climate Investments projects are directly reducing greenhouse gas emissions while supporting an equitable transition to a low-carbon future. California Climate Investments projects also deliver a variety of co-benefits to communities, including air quality improvements, increased climate adaptation and resiliency, energy and travel cost savings, support for high-quality jobs, affordable housing and active transportation, and more. By targeting these investments in the communities and households where investment is most needed, California has an opportunity to help address persistent inequities and provide economic benefits to the state's most vulnerable communities.

<sup>4</sup> For example, AB 398 (Chapter 135, Statutes of 2017) and AB 617 (Chapter 136, Statutes of 2017).

<sup>5</sup> See Senate Bill (SB) 862 (Chapter 36, Statutes of 2014) and SB 200 (Chapter 120, Statutes of 2019). Also, SB 901 (Chapter 626, Statutes of 2018) states that these annual budget appropriations shall include \$200 million through FY 2023-24 for forest health, fire prevention, and fuel reduction programs.

<sup>6</sup> See AB 398 (Chapter 135, Statutes of 2017).

The Department of Finance, the California Air Resources Board (CARB), and the over 20 agencies and departments administering California Climate Investments programs work together to track and report on progress and outcomes. Assembly Bill (AB) 1532 (Chapter 807, Statutes of 2012) requires the Department of Finance to submit an annual report to the Legislature. This document, the Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds (Annual Report), is a key resource to provide regular updates and transparency on the use of the state's portion of Cap-and-Trade Auction Proceeds. This report fulfills the statutory requirements by: describing program-level benefits; providing estimates of benefits including greenhouse gas emission reductions, co-benefits, and benefits to disadvantaged communities and low-income communities and households, collectively referred to as "priority populations";<sup>7</sup> and including project profiles demonstrating how these funds are improving lives across the state. Data are reported as follows:

- 2020: Data reported for December 1, 2019 through November 30, 2020.
- **Cumulative:** Data reported since a program's inception through November 30, 2020. 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 March 2021.

<sup>7</sup> For additional information, see page 21.





# 2020 IN CONTEXT

The COVID-19 pandemic, combined with the worsening effects of climate change and persistent racial and socioeconomic inequality, presented extraordinary challenges for Californians in 2020. California Climate Investments can play a role in the state's response to these issues while simultaneously helping the state meet its climate goals.

## **Responding to the COVID-19 Pandemic**

Communities all over the world are grappling with tragedy and unprecedented disruption resulting from the COVID-19 pandemic. In early 2020, state and local governments began to take measures to slow the spread of the disease, including issuing stay-at-home orders, ordering the temporary closure of nonessential institutions, and maximizing the use of remote working practices. The pandemic has disproportionately impacted people of color, who have experienced higher infection and mortality rates,<sup>8</sup> higher rates of job loss and financial disruption,<sup>9</sup> and less access to health care.<sup>10</sup>

The COVID-19 pandemic has resulted in a devastating economic downturn with unknown long-term effects. Many of the economic changes directly affect sectors tied to key climate priorities, including but not limited to: drastically reduced transit ridership with limited affordable alternatives for essential workers;<sup>11</sup> disruptions to agricultural operations;<sup>12</sup> changes in building energy use associated with increased telework;<sup>13</sup> and an ongoing homelessness and housing affordability crisis exacerbated by

Several resources are available that document transit-related impacts associated with the pandemic. For example, the California Transit Association maintains an ongoing list of COVID-19-related impacts on California's transit system, available at: caltransit.org/news-publications/our-newsroom/transit-watch/. The University of California Los Angeles Institute of Transportation Studies also maintains a summary of COVID-related impacts on transportation, including transit, available at www.its.ucla.edu/for-the-press/transportation-coronavirus-COVID-19/. Accessed March 25, 2021.

<sup>8</sup> Centers for Disease Control. "Health Disparities: Race and Hispanic Origin." www.cdc.gov/nchs/nvss/vsrr/COVID-19/ health\_disparities.htm. Accessed March 25, 2021.

<sup>9</sup> Parker, Kim, Rachel Minkin, and Jesse Bennett. Pew Research Center. "Economic Fallout From COVID-19 Continues to hit Lower-Income Americans the Hardest." September 24, 2020. https://www.pewresearch.org/socialtrends/2020/09/24/economic-fallout-from-covid-19-continues-to-hit-lower-income-americans-the-hardest/. Accessed March 25, 2021.

<sup>10</sup> Centers for Disease Control. "Health Equity Considerations and Racial and Ethnic Minority Groups." July 24, 2020. www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html. Accessed March 25, 2021.

<sup>12</sup> United States Department of Agriculture Economic Research Service. "Farms and Farm Households During the COVID-19 Pandemic." www.ers.usda.gov/covid-19/farms-and-farm-households. Accessed March 25, 2021.

<sup>13</sup> International Energy Agency. "The COVID-19 Crisis and Clean Energy Progress." www.iea.org/reports/the-covid-19-crisisand-clean-energy-progress. Accessed March 25, 2021.

pandemic-related job loss.<sup>14</sup> The pandemic also affected implementation of California Climate Investments programs. Community engagement and communication moved largely online; some grantees' priorities changed; and, in other cases, projects were delayed.

As the economy begins its recovery, the state can proactively design recovery efforts in ways that directly confront and address equity issues and support the transition to a low-carbon future. Many California Climate Investments programs support this effort and provide models for similar activities. For example, several California Climate Investments programs provide job training in high demand environmental sectors, including the California Workforce Development Board's Low-Carbon Economy Workforce program, which will support industry based, worker focused training partnerships that build skills for high road employers in ways that secure stronger economic opportunity for priority populations, individuals with barriers to employment, and under-represented workers. Another example is the California Strategic Growth Council's (SGC) Affordable Housing and Sustainable Communities (AHSC) program, which provides loans and capital grants to build affordable housing alongside transit and active transportation infrastructure and amenities. These projects increase the supply of affordable housing while improving access to green transportation options for residents and connecting them to economic centers and jobs. During the COVID-19 pandemic, the AHSC program provided transit vouchers to residents of AHSC-funded affordable housing units to help ensure transit access for frontline workers.

## **Renewed Focus on Improving Equity**

While issues of racial injustice are not new, California has a renewed commitment to more meaningfully address equity in state decision-making and improve outcomes for the most vulnerable members of society. Equity has been a core principle of the California Climate Investments program since its inception, with statutory requirements that a minimum percentage of projects provide direct, meaningful, and assured benefits to priority populations. Targeting investments towards priority populations helps residents in these areas benefit from California Climate Investments programs. However, California has additional opportunities to achieve more equitable outcomes from the distribution of California Climate Investments funds by consistently evaluating who benefits from funding decisions, who is involved in and absent from decision making, and by better supporting communities that lack access to funding opportunities.

Integrating equity into state climate efforts is an ongoing process. Over time, the scope of California Climate Investments programs has expanded to more meaningfully include community leadership and priorities, allow for project flexibility in response to community needs, and incorporate technical assistance and capacity building. For example, in November 2020, CARB announced the first set of grantees under the Sustainable Transportation Equity Project (STEP), an innovative transportation equity pilot that aims to address community residents' transportation needs, help people more easily get where they need to go, and reduce greenhouse gas emissions by funding planning, clean transportation, and supporting projects. STEP issues grants to partnerships between local governments and community-based organizations in order to center community knowledge and expertise. For additional information on California Climate Investments community engagement efforts, see the Outreach, Technical Assistance, and Transparency section of this report.

<sup>14</sup> See Public Policy Institute of California "How COVID-19 Could Deepen California's Housing Crisis." www.ppic.org/blog/ how-covid-19-could-deepen-californias-housing-crisis/. August 7, 2020. Accessed March 25, 2021.

## **Promoting Wildfire and Heat Resilience**

The frequency and intensity of large wildfires in California has increased dramatically over the past two decades, leaving millions of acres burned and thousands of Californians displaced or rebuilding. The 2020 fire season was particularly severe, with five of the six largest individual fires in California history<sup>15</sup> and more acres burned than in any year on record.<sup>16</sup> The catastrophic and unprecedented wildfires created prolonged periods of unhealthy air quality for millions of Californians,<sup>17</sup> devastated beloved natural sites, and may threaten water quality for years to come.<sup>18</sup> California also experienced record-setting extreme heat in 2020, exacerbating wildfires and increasing risk of heat-related illness and mortality.<sup>19</sup> Preventing large-scale wildfires is a key strategy to fighting climate change, but it is equally important for the state to build resiliency by supporting vulnerable populations in their ability to react to and recover from wildfire, extreme heat, and other climate disasters.

California Climate Investments programs fund a variety of activities related to wildfire prevention and resilience, including: CARB's Prescribed Fire Smoke Monitoring Program, which supports monitoring the air quality impacts from wildfire and controlled burns and helps Californians avoid exposure to smoke; the California Department of Forestry and Fire Protection's (CAL FIRE) Forest Health and Fire Prevention Grants programs, which help protect communities from wildfire and support forest resiliency through fuel reduction, fire prevention education, reforestation, pest management, conservation easements, job training programs, and planning; and the California Conservation Corp's Forest Health Training and Workforce Development Program, which conducts additional on-the-ground fuel reduction and reforestation projects along with urban forestry and greening projects that help protect communities from extreme heat.

## **New 2020 Budget Appropriations**

The COVID-19 pandemic disrupted the regular legislative process, introducing significant budgetary uncertainty. Given the uncertainty heading into Fiscal Year (FY) 2020–21, the 2020 Budget Act (Chapter 6, Statutes of 2020) did not include a comprehensive expenditure plan for the use of Cap-and-Trade Auction Proceeds. The Legislature did appropriate GGRF funds to support baseline state operations for ongoing program implementation. Programs with continuous appropriations continue to receive funding. Table 1 includes additional detail on appropriations by program.

# **Focusing Efforts to Meet Multiple Priorities**

The drought, flooding, wildfires, and extreme heat experienced in the state over the last decade have demonstrated to Californians that climate change has wide-ranging impacts and that California cannot solve pressing environmental, economic, and public health challenges without efforts that address the intersection of these issues. In 2020, Governor Gavin Newsom issued two climate-related executive

<sup>15</sup> California Department of Forestry and Fire Protection. "Top 20 Largest California Wildfires." www.fire.ca.gov/ media/4jandlhh/top20\_acres.pdf. Accessed January 20, 2021.

<sup>16</sup> California Department of Forestry and Fire Protection. "2020 Incident Archive." www.fire.ca.gov/incidents/2020/. Accessed January 20, 2021.

<sup>17</sup> Los Angeles Times. "How bad is all that wildfire smoke to our long-term health? 'Frankly', we don't really know.'" www.latimes.com/california/story/2020-09-19/california-fire-smoke-health-risks. Accessed January 20, 2021. Article cites data from California Air Resources Board, available at www.arb.ca.gov/aqmis2/aqdselect.php.

<sup>18</sup> Proctor, CR, Lee, J, Yu, D, Shah, AD, Whelton, AJ. "Wildfire caused widespread drinking water distribution network contamination." AWWA Wat Sci. 2020; e1183. doi.org/10.1002/aws2.1183. Accessed December 10, 2020.

<sup>19</sup> National Aeronautics and Space Administration Earth Observatory. "California Heatwave Fits a Trend." earthobservatory.nasa.gov/images/147256/californiaheatwavefitsatrend. September 6, 2020. Accessed January 2, 2021.

orders (EOs): EO N-79-20,<sup>20</sup> which sets a path forward to decarbonize the transportation sector, and EO N-82-20,<sup>21</sup> which focuses on preserving biodiversity and conserving natural and working lands. The 2020 EOs build on EO N-19-19, which included several new directives for transportation strategies and focused on leveraging state operations and transportation spending to promote climate goals.<sup>22</sup> The targets and actions included in these EOs establish a bold, ambitious framework for state agencies to work together on urgent and coordinated climate strategies. California Climate Investments help implement these EOs by providing incentives for zero-emission vehicles and equipment; supporting low-carbon transit, active transportation, and sustainable community development; and funding a variety of programs focused on nature-based strategies to protect and restore natural and working lands.

Partnerships across state agencies are critical to developing and implementing coordinated solutions. Since 2018, CARB has held joint public meetings twice a year with the California Transportation Commission, with the addition of the California Department of Housing and Community Development in 2020.<sup>23</sup> The goal of the joint meetings is for the three bodies to coordinate the implementation of policies that affect transportation, housing, and air quality. A consistent theme across the EOs and conversations at the joint meetings is the need for state agencies to align funding to meet shared objectives.

Evidence from continued inequities, the ongoing pandemic, and the worsening climate crisis make clear that the state must prioritize investments that can achieve multiple objectives to support collective goals. Because of the broad portfolio of programs and project types, the California Climate Investments umbrella provides a uniquev forum to consider how state agencies can align funding.

California Climate Investments can help promote collaborative efforts that simultaneously achieve multiple objectives in many ways. For example, administering agencies estimate a variety of cobenefits from project implementation, which can help identify investment types that serve multiple priorities. Furthermore, several individual California Climate Investments programs are specifically designed to integrate cross-sectoral projects. For example, SGC's Transformative Climate Communities program empowers communities most impacted by pollution to choose their own goals, strategies, and projects to reduce greenhouse gas emissions and local air pollution. By allowing communities to guide the process and select their own combination of project components, the Transformative Climate Communities program also encourages an equitable, community-driven approach to addressing local challenges.

<sup>20</sup> For the full text of this executive order, visit www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-text.pdf.

<sup>21</sup> For the full text of this executive order, visit www.gov.ca.gov/wp-content/uploads/2020/10/10.07.2020-EO-N-82-20-signed.pdf.

<sup>22</sup> For the full text of this executive order, visit www.gov.ca.gov/wp-content/uploads/2019/09/9.20.19-Climate-EO-N-19-19.pdf.

<sup>23</sup> See AB 179 (Chapter 737, Statutes of 2017) and AB 185 (Chapter 534, Statutes of 2019).



# OUTCOMES FROM 2020

### **Auction Proceeds**

To date, Cap-and-Trade auctions have generated \$14.9 billion for the GGRF, and the Legislature has appropriated \$14.0 billion in funding for California Climate Investments programs. As of the end of 2020, there are more than 20 state agencies and departments involved in program development, project selection, and implementation of 71 California Climate Investments programs. Table 1 shows the FY 2020–21 and cumulative appropriations for investments as of November 30, 2020.



#### Table 1: FY 2020-21 & Cumulative Appropriations

		Appro	priations (\$A	<b>1)</b> <sup>24, 25</sup>		
Administering Agency	Program	Cumulative Appropriations Prior to FY 2020–21	FY 2020-21	Cumulative Total <sup>26</sup>		
	Community Air Protection	\$766	-	\$766		
	Fluorinated Gases Emission Reduction Incentives	\$1	-	\$1		
California Air Resources Board	Funding Agricultural Replacement Measures for Emission Reductions	\$251	\$251 -			
Administering AgencyCon Fluo RedCalifornia Air Resources BoardFund MedCalifornia Coastal CommissionFund MedCalifornia Coastal CommissionCon MedCalifornia Conservation CorpsTrain DevelopmentCalifornia Department of Community Services and DevelopmentLow MedCalifornia Department of Fish and WildlifeWet RestCalifornia Department of Fish and WildlifeMed MedCalifornia Department of Food and AgricultureMed RestCalifornia Department of Forestry and Fire ProtectionStat Com andCalifornia Department of Forestry and Fire ProtectionFire Fore SustCalifornia Department of Forestry and Fire ProtectionStat Com 	Low-Carbon Transportation	\$2,134	-	\$2,134		
	Prescribed Fire Smoke Monitoring	\$4	-	\$4		
	Woodsmoke Reduction	\$8	-	\$8		
California Coastal Commission	Coastal Resilience Planning	\$5	-	\$5		
California Conservation Corps	Training and Workforce Development	\$41	\$15	\$56		
California Department of Community Services and Development	Low-Income Weatherization	\$212	-	\$212		
California Department of Fish and Wildlife	Wetlands and Watershed Restoration	\$47	-	\$47		
	Dairy Methane	\$289	-	\$289		
California Donartmont	Healthy Soils	\$41	-	\$41		
of Food and Agriculture	Renewable Alternative Fuels	\$3	-	\$3		
	State Water Efficiency and Enhancement	\$66	-	\$66		
Low-CarboPrescribedPrescribedWoodsmathCoastal CommissionCoastal RCoastal CommissionTraining ofConservation CorpsDevelopmentCalifornia Department f Community Services nd DevelopmentLow-IncorCalifornia Department f Fish and WildlifeWetlands RestorationCalifornia Department f Food and AgricultureDairy Me Healthy S RenewabCalifornia Department f Food and AgricultureCommuni and Preper Forest Ca Sustainab	Community Fire Planning and Preparedness	\$10	-	\$10		
California Department of	Fire Prevention	\$194	\$84	\$278		
Forestry and Fire Protection	Forest Carbon Plan Implementation	\$60	\$35	\$95		
	Sustainable Forests	\$624	\$35	\$659		
California Department of Resources Recycling and Recovery	Waste Diversion	\$141	-	\$141		

<sup>24</sup> 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. Transferred funds are shown here in the originating agency's totals.

26 Listed values may not sum due to rounding.

<sup>25</sup> Appropriations from previous fiscal years may be retroactively adjusted to account for budget control sections or for special legislation (e.g., trailer bills). As a result, reported cumulative appropriations may not reflect summations of budget act line items.

		Appro	priations (\$A	<b>1)</b> <sup>24, 25</sup>
Administering Agency	Program	Cumulative Appropriations Prior to FY 2020–21	FY 2020-21	Cumulative Total <sup>26</sup>
California Department	Active Transportation	\$10	-	\$10
of Transportation	Low-Carbon Transit Operations	\$558	\$49	\$607
California Department	State Water Project Turbines	\$20	-	\$20
of Water Resources	Water-Energy Grant	\$49	-	\$49
	Food Production Investment	\$124	-	\$124
California Energy Commission	Low-Carbon Fuel Production	\$13	-	\$13
	Renewable Energy for Agriculture	\$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	\$51	\$1	\$52
California High-Speed Rail Authority	High-Speed Rail Project	\$3,317	\$247	\$3,564
California Natural	Regional Forest and Fire Capacity	\$20	-	\$20
Resources Agency	Urban Greening	\$156	-	\$156
California State Coastal Conservancy	Climate Ready	\$7	-	\$7
California State Transportation Agency	Transit and Intercity Rail Capital	\$1,227	\$98	\$1,325
California State Water Resources Control Board	Safe and Affordable Drinking Water Fund	\$100	\$49	\$149
	Affordable Housing and Sustainable Communities (Including Sustainable Agricultural Lands Conservation)	\$2,273	\$196	\$2,469
Calitornia Strategic Growth Council	Climate Change Research	\$34	-	\$34
	Technical Assistance	\$6	-	\$6
	Transformative Climate Communities	\$241	-	\$241
California Wildlife Conservation Board	Climate Adaptation and Resiliency	\$20	-	\$20
California Workforce Development Board	Low-Carbon Economy Workforce	\$30	\$3	\$33
San Francisco Bay Conservation and Development Commission	Climate Resilience Planning	\$3	\$2	\$5
	Total	\$13,167	\$813	\$13,980

To provide a clear and consistent approach for tracking and reporting funds and project benefits, the following terms describe how the funding flows from the Legislature to recipients: appropriated, allocated, awarded, and implemented. These terms are specific to the reporting and tracking of California Climate Investments and may differ from the terms used by individual administering agencies. Figure 3 provides working definitions for terms used to report outcomes from California Climate Investments.

#### **Figure 3: Terms for Funding Status**



Figure 4 shows the amount of California Climate Investments funding by status, progressing from when funds are initially appropriated by the Legislature through the implemented stage.<sup>27</sup> Agencies and award recipients must complete many tasks between an appropriation and project implementation, which is the primary reason for the gap between appropriated and awarded funds. Completing all of these tasks can take more than a year and may include: 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 application and quantification methodologies, 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.

<sup>27</sup> Previous California Climate Investments Annual Reports included a "Selected" phase in discussions of funding status. In order to better communicate the proportion of funds committed to future projects, this and future Annual Reports will focus on the "Awarded" phase.

#### Figure 4: Summary of Funding by Status



### **Program Investments to Date**

Table 2 includes cumulative summary statistics for each California Climate Investments program. The "Program Pages" section of this report provides individual program pages that include more information on the program design, projects funded, and project-specific co-benefits.

Detailed data are available at caclimateinvestments.ca.gov, including information on project location, greenhouse gas emission reductions, and benefits to priority populations. For information on cumulative budgetary expenditures by program, see Appendix D: Cumulative Budgetary Expenditures.



#### Table 2: Summary of Investments and Outcomes through 2020

Administering Agency	Subprogram	Cumulative Funding Status (\$M)			Implemented Projects				Benefiting Priority Populations <sup>28</sup>	
		Allocated	Awarded <sup>29</sup>	Implemented	GHG Reduction (1,000 MTCO <sub>2</sub> e)	Cost per GHG (\$/MTCO <sub>2</sub> e)	Number of Projects	Intermediary Administrative Expenses (\$M) <sup>30</sup>	(\$M)	%
	AB 617 Implementation	\$40.0	\$40.0	\$20.0	_31	-	1	\$20.0	TBD	)
	Community Air Grants	\$25.0	\$15.0	\$15.0	_31	-	56	-	\$13.6	91%
	Community Air Protection Incentives	\$704.4	\$700.7	\$322.7	166	\$1,947	1,858	\$46.6	\$259.6	94%
	Fluorinated Gases Emission Reduction Incentives	\$1.0	This program has not yet awarded or implemented funds.							
California Air Resources Board	Funding Agricultural Replacement Measures for Emission Reductions	\$250.8	\$250.8	\$150.4	110	\$1,367	3,935	\$4.5	\$99.4	68%
Resources Board	Advanced Technology Demonstration and Pilot Projects	\$115.0	\$79.2	\$79.2	16	\$4,939	11	-	\$79.2	100%
	Agricultural Worker Vanpools	\$6.0	\$6.0	\$6.0	5	\$1,307	1	-	\$6.0	100%
	Clean Cars For All	\$102.0	\$102.0	\$73.0	56	\$1,299	9,128	\$6.3	\$58.7	88%
	Clean Mobility in Schools Project	\$24.6	\$24.6	\$24.6	10	\$2,453	3	-	\$24.6	100%
	Clean Mobility Options	\$55.2	\$51.6	\$10.7	3	\$3,312	31	-	\$10.7	100%

28 For programs that contract with intermediaries to administer projects, these costs are reported and included in the total implemented funds and in the "Intermediary Administrative Expenses (\$M)" column. Costs incurred for administration are not included when calculating benefits to priority populations.

29 Per statute, some administering agencies may plan for future projects by selecting projects in advance of receiving appropriations to fulfill those commitments, such as for the California State Transportation Agency's Transit and Intercity Rail Capital Program. For this reason, in some instances "Awarded" funds may exceed "Allocated" funds. The High-Speed Rail Authority does not award funds, so this value represents implemented funds as of November 30, 2020. The values reported here as "Awarded" also include "Implemented" funds.

30 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.

31 These programs do not have a quantified greenhouse gas emission benefit.

Administering Agency		Cumulative Funding Status (\$M)			Implemented Projects				Benefiting Priority Populations <sup>28</sup>			
	Subprogram	Allocated	Awarded <sup>29</sup>	Implemented	GHG Reduction (1,000 MTCO <sub>2</sub> e)	Cost per GHG (\$/MTCO <sub>2</sub> e)	Number of Projects	Intermediary Administrative Expenses (\$M) <sup>30</sup>	(\$M)	%		
	Clean Off-Road Equipment Voucher Incentive Project	\$44.2	\$44.2	\$18.8	13	\$1,472	133	\$1.3	\$12.3	70%		
	Clean Vehicle Rebate Project	\$948.9	\$946.0	\$817.3	6,240	\$131	338,658	\$15.3	\$253.4	32%		
California Air	Financing Assistance for Lower-Income Consumers	\$33.9	\$15.9	\$5.9	6	\$1,038	923	\$1.1	\$3.7	78%		
	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project	\$486.4	\$475.3	\$271.7	1,112	\$244	4,298	\$6.5	\$168.1	63%		
	Outreach, Education, and Awareness	\$6.0	\$6.0	\$6.0	_31	-	1	-	\$6.0	100%		
Resources Board	Rural School Bus Pilot Projects	\$61.6	\$58.6	\$35.1	32	\$1,107	116	\$0.3	\$21.0	60%		
(cont.)	Sustainable Transportation Equity Project	\$19.5	\$19.5 This program has not yet awarded or implemented funds.									
	Zero and Near Zero-Emission Freight Facilities	\$148.7	\$148.7	\$148.7	50	\$2,997	10	-	\$148.7	100%		
	Zero-Emission Truck and Bus Pilot Projects <sup>32</sup>	\$85.0	\$82.8	\$82.8	107	\$778	9	-	\$64.5	78%		
	Prescribed Fire and Smoke Monitoring	\$7.2	\$3.9	\$3.9	_31	-	51	-	\$0	0%		
	Woodsmoke Reduction	\$8.0	\$8.0	\$6.8	94	\$72	1,880	\$0.8	\$5.1	86%		
California Coastal Commission	Coastal Resilience Planning	\$4.5	\$2.1	\$2.1	_31	-	16	-	\$1.1	54%		
California Conservation Corps	Training and Workforce Development Program	\$55.9	\$20.4	\$20.4	183	\$111	346	-	\$16.3	80%		

<sup>32</sup> This program has obligated all project dollars. The remaining allocated funds are reserved for state operations administrative costs.

Administering Agency	Subprogram	Cumulative Funding Status (\$M)			Implemented Projects				Benefiting Priority Populations <sup>28</sup>	
		Allocated	Awarded <sup>29</sup>	Implemented	GHG Reduction (1,000 MTCO <sub>2</sub> e)	Cost per GHG (\$/MTCO <sub>2</sub> e)	Number of Projects	Intermediary Administrative Expenses (\$M) <sup>30</sup>	(\$M)	%
	Community Solar <sup>32</sup>	\$2.2	\$2.0	\$2.0	10	\$204	1	-	\$2.0	100%
California Department of Community Services and Development	Farmworker Housing Single-Family Energy Efficiency and Solar Photovoltaics	\$12.3	\$10.9	\$6.7	8	\$860	393	\$1.1	\$5.3 <sup>33</sup>	95% <sup>33</sup>
	Multi-Family Energy Efficiency and Renewables	\$63.9	\$63.9	\$37.2	161	\$230	8,342	\$1.9	\$35.2	100%
	Single-Family Energy Efficiency and Solar Photovoltaics	\$70.0	\$70.0	\$70.0	216	\$324	16,146	\$9.3	\$60.7	100%
	Single-Family Solar Photovoltaics	\$51.0	\$51.0	\$51.0	134	\$382	3,160	\$6.8	\$44.2	100%
California Department of Fish and Wildlife	Wetlands & Watershed Restoration Program <sup>32</sup>	\$46.7	\$36.9	\$36.9	1,000	\$37	22	-	\$20.5	55%
	Alternative Manure Management Program	\$2000	\$60.9	\$60.9	1,009	\$60	104	\$0.7	\$0	0%
California	Dairy Digester Research and Development Program	<b>Ψ</b> ΖΟΟ.Υ	\$180.0	\$180.0	19,379	\$9	107	\$0.8	\$117.7	66%
Department of Food	Healthy Soils Program	\$40.5	\$34.1	\$34.1	289	\$118	479	\$0.1	\$12.1	35%
and Agriculture	Renewable and Alternative Fuels	\$3.0	\$3.0	\$3.0	_31	-	1	-	\$O	0%
	State Water Efficiency and Enhancement Program <sup>32</sup>	\$66.2	\$61.8	\$61.8	744	\$83	598	\$0.5	\$22.7	37%

<sup>33</sup> Due to an error, this value does not reflect an additional \$0.3M in benefits to priority populations. Including these additional benefits, 100% of project dollars are benefiting priority populations.

Administoring		Cumulative Funding Status (\$M)			Implemented Projects				Benefiting Priority Populations <sup>28</sup>		
Administering Agency	Subprogram	Allocated	Awarded <sup>29</sup>	Implemented	GHG Reduction (1,000 MTCO <sub>2</sub> e)	Cost per GHG (\$/MTCO <sub>2</sub> e)	Number of Projects	Intermediary Administrative Expenses (\$M) <sup>30</sup>	(\$M)	%	
	Community Fire Planning and Preparedness	\$10.0	\$0.2	\$0.2	_31	-	1	-	\$0.2	100%	
California	Fire Prevention Program	\$278.1	\$161.6	\$161.6	_31	-	87	-	\$108.0	67%	
Forestry and Fire Protection	Forest Carbon Plan Implementation	\$89.5	\$42.2	\$42.2	_31	-	73	-	\$5.3	13%	
	Fire Prevention Grants Program	\$580 1	\$156.6	\$156.6	_31	-	222	-	\$49.4	32%	
	Forest Health Program	φ <b>360.4</b>	\$317.8	\$317.8	11,105	\$29	158	-	\$117.0	37%	
California	Forest Health Research	\$5.5	\$5.4	\$5.4	_31	-	26	-	\$1.2	23%	
Department of Forestry and Fire Protection	Urban and Community Forestry Program	\$77.8	\$74.8	\$56.2	394	\$143	93	-	\$55.3	98%	
Protection ( f	Community Composting for Green Spaces Grant	\$1.4	\$1.4	This program has not yet implemented funds.							
	Food Waste Prevention and Rescue Grants	\$24.7	\$20.2	\$20.2	434	\$47	64	-	\$19.4	96%	
Department of Resources Recycling	Organics and Recycling Manufacturing Loans	\$9.2	\$7.7	\$7.7	772	\$10	5	-	\$0.8	11%	
and Recovery	Organics Grants	\$75.4	\$72.5	\$72.5	1,312	\$55	29	-	\$57.0	79%	
	Recycled Fiber, Plastic, and Glass Grants	\$36.1	\$25.7	\$25.7	671	\$38	11	-	\$14.7	57%	
	Reuse Grant Program	\$2.0			Ne	ew program for	FY 2021.				
California	Active Transportation Program	\$10.0	\$10.0	\$10.0	<]	\$163,934	3	-	\$10.0	100%	
Department of Transportation	Low-Carbon Transit Operations Program	\$606.7	\$558.3	\$558.3	6,224	\$90	719	-	\$540.2	97%	
California	State Water Project Turbines	\$20.0	\$20.0	\$20.0	37	\$542	2	-	\$O	0%	
Pepartment of Vater Resources	Water-Energy Grant Program	\$49.3	\$45.3	\$36.7	382	\$96	95,300	-	\$23.1	63%	

		Cumulative Funding Status (\$M)			Implemented Projects				Benefiting Priority Population <u>s<sup>28</sup></u>	
Administering Agency	Subprogram	Allocated	Awarded <sup>29</sup>	Implemented	GHG Reduction (1,000 MTCO <sub>2</sub> e)	Cost per GHG (\$/MTCO <sub>2</sub> e)	Number of Projects	Intermediary Administrative Expenses (\$M) <sup>30</sup>	(\$M)	%
California Energy Commission	Food Production Investment Program	\$124.0	\$103.2	\$103.2	3,172	\$33	42	-	\$89.6	87%
	Low-Carbon Fuel Production	\$12.5	\$12.5	\$12.5	452	\$28	4	-	\$11.7	94%
	Renewable Energy for Agriculture Program <sup>32</sup>	\$10.0	\$9.5	\$9.5	127	\$75	45	-	\$1.134	11% <sup>34</sup>
California Environmental Protection Agency	Transition to a Carbon-Neutral Economy	\$2.6	\$2.6	\$2.6	_31	-	2	-	\$0	0%
California Governor's	Fire Engines and Maintenance	\$26.0	\$4.8	\$4.8	_31	-	1	-	\$O	0%
Services	Wildfire Response and Readiness	\$25.0	\$25.0	\$25.0	_31	-	61	-	\$O	0%
California High-Speed Rail Authority	High-Speed Rail Project	\$3,563.8	\$2,284.8	\$2,284.8	_35	_36	1	-	\$0	0%
California Natural	Regional Forest and Fire Capacity	\$20.0	\$18.1	\$4.6	_31	-	27	-	\$1.3	27%
Resources Agency	Urban Greening Program	\$156.0	\$117.4	\$117.4	45	\$2,626	69	-	\$110.9	94%
California State Coastal Conservancy	Climate Ready Program <sup>32</sup>	\$7.0	\$6.7	\$6.7	2	\$3,982	18	-	\$4.1	62%
California State Transportation Agency	Transit and Intercity Rail Capital Program	\$1,324.8	\$2,123.4	\$389.9	2,557	\$153	29	-	\$357.6	92%
California State Water Resources Control Board	Safe and Affordable Drinking Water Fund	\$149.3	\$64.4	\$50.7	_31	-	18	-	\$49.2	97%

<sup>34</sup> Due to an error, this value does not reflect an additional \$0.3M in benefits to priority populations. Including these additional benefits, 15% of project dollars are benefiting priority populations.

<sup>35</sup> Estimated GHG emission reduction from the California High-Speed Rail Project is 102 million MTCO<sub>2</sub>e over its first 50 years of operating life, as detailed in the Revised Draft 2020 Business Plan available at hsr.ca.gov/about/business\_plans/2020/.

<sup>36</sup> GGRF funds provide an essential part of the total funds for the system, though 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.

Administerina	Subprogram	Cumulative Funding Status (\$M)			Implemented Projects				Benefiting Priority Populations <sup>28</sup>	
Administering Agency		Allocated	Awarded <sup>29</sup>	Implemented	GHG Reduction (1,000 MTCO <sub>2</sub> e)	Cost per GHG (\$/MTCO <sub>2</sub> e)	Number of Projects	Intermediary Administrative Expenses (\$M) <sup>30</sup>	(\$M)	%
	Affordable Housing and Sustainable Communities Program	¢0.070.4	\$838.6	\$838.6	1,793	\$468	85	-	\$674.6	80%
	Sustainable Agricultural Lands Conservation Program	ΨΖ,Ζ/ Ζ.4	\$153.5	\$46.4	5,319	\$9	39	-	\$4.3	9%
California Strategic Growth Council	Climate Change Research Program <sup>32</sup>	\$34.0	\$32.3	\$32.3	_31	-	20	-	\$0	0%
	Technical Assistance	\$13.5	\$9.4	\$6.9	_31	-	26	-	\$5.6	81%
	Transformative Climate Communities Program	\$241.3	\$179.1	\$164.8	123	\$1,341	119	\$2.9	\$156.9	97%
California Wildlife Conservation Board	Climate Adaptation and Resiliency Program	\$20.0	\$11.5	\$11.5	2	\$6,767	20	-	\$5.9	51%
California Workforce Development Board	Low-Carbon Economy Workforce	\$30.3		This	program has	not yet awarde	d or implem	ented funds.		
San Francisco Bay Conservation and Development Commission	Climate Resilience Planning	\$4.7	\$4.5	\$4.5	_31	-	12	-	\$0	0%
	Total	\$13,791.7	\$11,177.2	\$8,272.6	66,072	-	488,246	\$126.9	\$4,046.9	50%

## **Delivering Benefits to Priority Populations**

### **Statutory Investment Minimums**

Senate Bill (SB) 535 (Chapter 830, Statutes of 2012) set minimum investments for projects that benefit disadvantaged communities and projects that are located within disadvantaged communities. In 2016, AB 1550 (Chapter 369, Statutes of 2016) amended the investment minimums for disadvantaged communities introduced by SB 535 to require that a minimum percentage of projects be located within and provide a benefit to disadvantaged communities. AB 1550 also established new investment minimums for low-income communities and low-income households. Under AB 1550, California Climate Investments must be allocated, at minimum, as follows:

- 25 percent to projects located within the boundaries of, and benefiting individuals living in, disadvantaged communities.
- 5 percent to projects that benefit low-income households or to projects located within the boundaries of, and benefiting individuals living in, low-income communities located anywhere in the state.
- 5 percent to projects that benefit low-income households that are outside of, but within a half-mile of, disadvantaged communities, or to projects located within the boundaries of, and benefiting individuals living in, low-income communities that are outside of, but within a half-mile of, disadvantaged communities.

SB 535 gives the California Environmental Protection Agency (CalEPA) responsibility for identifying disadvantaged communities "based on geographic, socioeconomic, public health, and environmental hazard criteria." CalEPA designates individual census tracts as disadvantaged communities using the CalEnviroScreen tool, which can be accessed at oehha.ca.gov/calenviroscreen.<sup>37</sup> More information is available at calepa.ca.gov/envjustice/ghginvest/. AB 1550 defines "low income" as census tracts and households with incomes at or below either: 1) 80 percent of the statewide median income, or 2) the threshold designated as low income by the California Department of Housing and Community Development's list of state income limits.

These requirements apply to California Climate Investments as a whole, rather than to individual programs within the California Climate Investments portfolio. CARB, in consultation with administering agencies, develops individual program targets for each fiscal year of funding.<sup>38</sup> These targets help drive investments that achieve meaningful and direct benefits to priority populations, as well as help California Climate Investment levels prescribed in AB 1550 while recognizing the uniqueness of each program.

To count a project toward the investment minimums, administering agencies must demonstrate that a project provides direct, meaningful, and assured benefits and meets an important community need according to CARB's "Funding Guidelines for Agencies Administering California Climate Investments" (Funding Guidelines).<sup>39</sup> Each project can be counted toward benefiting only a single priority population category; however, these projects may actually provide benefits to more than one priority population category (e.g., to both residents of disadvantaged communities and low-income households). CARB works with administering agencies to develop criteria for how projects can provide benefits to priority populations and solicits input through a public comment process. The Funding Guidelines also include requirements and guidance for targeting investments to priority populations.

<sup>37</sup> In February 2021, the Office of Environmental Health Hazard Assessment released the draft CalEnviroScreen 4.0, an updated version of the screening tool CalEPA uses to designate disadvantaged communities. CalEPA may update its designation of disadvantaged communities based on the CalEnviroScreen 4.0 results.

<sup>38</sup> Investment targets are available at arb.ca.gov/cci-fundingguidelines.

<sup>39</sup> Funding Guidelines are available at arb.ca.gov/cci-fundingguidelines.

### **Cumulative Benefits to Priority Populations**

Cumulatively, 50 percent, or just over \$4.0 billion, in implemented California Climate Investments project dollars has benefited priority populations, as shown by Figure 5. 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.



Out of the cumulative \$8.3 billion in implemented projects, \$4.1 billion have been subject to the requirements of AB 1550, over 68 percent of which benefit priority populations.



### **Going Beyond Priority Populations**

California Climate Investments also provides real benefits to vulnerable populations that are not explicitly described in SB 535 or AB 1550. Programs are providing benefits to tribes, socially disadvantaged farmers, minority and women-owned businesses, and small businesses, among others. In many cases, programs have taken specific steps to identify or define these populations and designed auidelines or developed targets to help ensure these populations are able to compete for funding. For example, the California Department of Food and Agriculture currently targets a minimum of 25 percent of its technical assistance funds to assisting socially disadvantaged farmers with applications to its suite of GGRF-funded Climate Smart Agriculture programs.<sup>40</sup> Socially disadvantaged farmers are defined by the Farmer Equity Act of 2017<sup>41</sup> to include members of the following groups: African Americans, Native Indians, Alaskan Natives, Hispanics, Asian Americans, and Native Hawaiians and Pacific Islanders. While California Climate Investments does not separately track or report the funds benefiting these populations, these investments focused on vulnerable 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.

## Benefits from High-Speed Rail Project Implementation

Implementation of the High-Speed Rail Project provides a variety of benefits to Californians, including benefits that result from a proven focus on small business contracting and hiring disadvantaged workers, including those in disadvantaged communities. However, California Climate Investments does not assess these benefits, and therefore High-Speed Rail Project implementation does not currently contribute towards meeting statutory investment minimums for benefits to priority populations. As a result, the total cumulative benefit to priority populations discussed in this document is understated. For more information about benefits generated through High-Speed Rail Project implementation, see page 95.

<sup>40</sup> See the 2021 Climate Smart Agriculture Technical Assistance Grants Request for Proposals at www.cdfa.ca.gov/oefi/ climate/docs/CSA\_TAG\_RFP\_Final.pdf.

<sup>41</sup> AB 1348 (Chapter 620, Statutes of 2017).


## BENEFITS

The suite of California Climate Investments programs is designed not only to facilitate greenhouse gas emission reductions but also to provide a wide range of environmental, economic, and public health benefits.

## **Facilitating Greenhouse Gas Emissions Reductions**

Facilitating greenhouse gas emission reductions is the core objective of California Climate Investments. Administering agencies report on estimated greenhouse gas emissions reductions over project lifetimes using CARB-developed quantification methodologies and calculator tools.<sup>42</sup> Cumulatively, investments reported as implemented are expected to reduce 66 million metric tons of carbon dioxide equivalent over project lifetimes, in addition to expected greenhouse gas emission reductions attributable to the High-Speed Rail Project.

Table 2 details the greenhouse gas emission reduction cost-effectiveness of each program's GGRF expenditures. These figures do not account for the non-GGRF (or "leveraged") funds that may also support these investments. Overall, California Climate Investments are reducing greenhouse gas emissions at an average rate of \$125 per MTCO<sub>2</sub>e, not including greenhouse gas emission reductions attributable to the High-Speed Rail Project. Compared to 2019, the average cost-effectiveness of California Climate Investments has decreased slightly, in part due to the growing suite of programs that facilitate the reduction of greenhouse gas emissions by providing funds for technical assistance, outreach, research, and planning rather than reducing emissions directly.

Greenhouse gas emission reduction cost-effectiveness is an important metric to use in considering the climate benefits of California Climate Investments, but does not paint the full picture. For example, some programs with lower greenhouse gas emission reduction cost-effectiveness focus specifically on delivering benefits to priority populations, which may require greater incentive amounts or additional spending on outreach and technical assistance to ensure equitable access to programs. Another key program objective is to support the long-term transition to a low-carbon future, and public funding is often critical to spur next generation technologies that are typically more expensive than commercially available technologies. Many California Climate Investments projects support early-stage technology development and demonstrations. For example, CARB's Advanced Technology Demonstration and Pilot Projects accelerate adoption and commercialization of zero-emission and plug in hybrid heavy duty

<sup>42</sup> Available at arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials.

vehicles and off-road equipment, all while providing vital feedback to the manufacturers about their use. While sometimes less cost-effective on a per-ton CO<sub>2</sub>e basis, these investments can signal opportunities for new businesses and technological development that will support a low-carbon economy.

## **Providing Co-Benefits**

CARB and administering agencies document a wide array of environmental, economic, and public health co-benefits. The co-benefits resulting from California Climate Investments projects provide significant value to the state beyond greenhouse gas emission reductions, such as criteria and toxic air pollutant emission reductions, the construction of affordable housing units near transit, increased resiliency to climate impacts, and acres of conserved habitat.

Agencies continue to report important co-benefits, which support legislative priorities, state goals, and community benefits. Because of the time delay between when projects are awarded funds and the project reaches the implemented stage, the number of programs and projects that use the enhanced tools to report co-benefits outcomes is increasing over time. While only an increasing subset of projects currently reports quantified co-benefits, the additional data help to demonstrate how California Climate Investments programs are achieving benefits beyond greenhouse gas emission reductions. Table 3 highlights several of the quantified outcomes expected over the life of projects implemented in 2020 alongside the cumulative lifetime benefits expected from all projects that have reported co-benefit data.

Co-Benefit	Outcomes from 2020 Investments	Outcomes from Cumulative Investments
Reduced Nitrous Oxide (NO <sub>x</sub> ) emissions	19,900 tons	37,500 tons
Reduced diesel particulate matter (PM) emissions	1,200 tons	1,900 tons
Reduced PM <sub>2.5</sub> emissions	1,700 tons	3,300 tons
Reduced reactive organic gas emissions	9,900 tons	11,600 tons
Affordable housing created	2,462 units	7,235 units
Land preserved, restored, or treated	128,000 acres	640,000 acres
Waste diverted from landfills	148,000 tons	4,778,000 tons
Fuel use avoided	341 million gallons (gas and diesel)	513 million gallons (gas and diesel)
Trees planted	500,000	11,500,000

## Table 3: Reported 2020 Project Co-Benefits

In 2020, there was a particular uptick in reporting of toxic diesel particulate matter reductions, criteria air pollutant emission reductions, and avoided use of fossil fuels expected over project lifetimes. These reported expected reductions were driven by CARB's Community Air Protection Incentives, Clean Vehicle Rebate Program, Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), and FARMER, as well as the California Energy Commission's Food Production Investment Program, SGC's Sustainable Agricultural Lands Conservation program, the California Department of Transportation's Low-Carbon Transit Operations Program, and the California Department of Food and Agriculture's Dairy Digester Research and Development Program.

Reducing criteria and toxic air pollution is an important co-benefit associated with many California Climate Investments projects. Reductions in criteria air pollutants and toxic air contaminants can reduce the health risk from air pollution, particularly when projects are located in communities with disproportionate exposure to air pollution. Implemented projects are cumulatively expected to result in public health benefits such as fewer incidents of premature cardiopulmonary mortality, hospitalizations for cardiovascular and respiratory illness, and emergency room visits for respiratory illness and asthma. These benefits have increased importance for California's priority populations, particularly for those Californians that reside in the state's disadvantaged communities, which bear a disproportionate share of the state's environmental, health, and socioeconomic burdens. California Climate Investments are supporting projects to improve air quality at the community level. For example, CARB's Community Air Protection Incentives provides emissions reduction benefits to communities identified through the AB 617 (Chapter 136, Statutes of 2017) community selection process by providing incentives to reduce emissions from mobile and stationary sources. Many of these communities are located near freight sources and freeways due to historical inequitable "redlining" practices and, as a result, experience air pollution and health inequities.

In addition to the quantitative benefits highlighted above, California Climate Investments programs support a range of other activities that help the state meet some of its most pressing challenges. For example, SGC's AHSC program has cumulatively made investments to create 7,775 housing units near transit, with almost 6,900 affordable units, helping to address the state's housing, mobility, and climate goals, while their Sustainable Agricultural Land Conservation program has conserved nearly 43,000 acres of land at risk of conversion, helping to encourage infill development.

Cumulatively, California Climate Investments consumer-based voucher programs have served at least 43,202 low-income households in the state, helping these households purchase cleaner vehicles, install home solar panels, and make energy efficiency upgrades to their homes, saving them money on fuel and energy. This value reflects only projects that have been reported to CARB as serving low-income households, and the true number of low-income households served by California Climate Investments programs is likely even greater, as not all programs evaluate household income levels or report this information to CARB.

Multiple programs – including AHSC, the California State Transportation Agency's Transit and Intercity Rail Capital Program, the California Department of Transportation's Low-Carbon Transit Operations Program, and the California Natural Resources Agency's Urban Greening program – increase access to transit and active transportation infrastructure, which lowers transportation costs, expands opportunities for employment, and can provide health benefits from more active commutes.

Several programs focus on reducing risk and increasing resiliency to climate impacts through local planning. For example, CAL FIRE's Community Fire Planning and Preparedness program is partnering with the Governor's Office of Planning and Research, the University of California Cooperative Extension, and county governments in the wildland-urban interface to provide funds and training for local planning, create a new fire outreach and extension program, and support community fire prevention and preparedness, including the maintenance of evacuation routes. The Coastal Commission's Coastal Resilience Planning program helps local governments address the impacts of climate change and sea level rise through the development or updating of local land use plans for the coastal zone. Other programs also promote resiliency while supporting the transition to carbon neutrality. For example, the California Department of Food and Agriculture's Healthy Soils Program supports resiliency and the shift to carbon neutrality by promoting healthy soil and land conservation practices and removing carbon from the air and storing it in California's soils.

## **Leveraging Other Funding Sources**

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. Cumulatively, \$8.3 billion in implemented GGRF funds have leveraged an additional \$17.3 billion from other sources, not including other funds leveraged for the High-Speed Rail Project. These billions of dollars of non-GGRF funds support California Climate Investments projects that reduce greenhouse gas emissions, benefit priority populations, and generate co-benefits such as employment opportunities, cleaner air, and lower transportation costs. Appendix B: Cumulative California Climate Investments Leveraged Funds provides more detail about leveraged funds by program.

While these leveraged funds can help extend the impact of California Climate Investments by increasing the overall number and scale of individual projects, securing match funding can be a barrier for communities that have less access to additional funding sources. In some cases, California Climate Investments programs have responded to this issue by, for example, removing matching funds requirements for projects that are located in and 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 for funding continues to grow. On average, California Climate Investments' competitive solicitations in 2020 received applications requesting more than 500 percent of available funding. This represents a dramatic increase over 2019, driven largely by very high demand for funds for transit and intercity rail projects, as well as increased demand for fire prevention grants and dairy methane projects, among others. Appendix C includes statistics on the applications received compared to the applications selected for funding in 2020 for each competitive program. Agencies are required to post information on their program websites on 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 program websites.

## **Reaching Across California**

California Climate Investments span all areas of the state. Each agency designs programs and selects projects in accordance with the Funding Guidelines and their own program objectives, which can include targeting certain populations or geographies. For example, programs such as the San Francisco Bay Conservation and Development Commission's Climate Resilience Planning program focus investments in specific geographic areas, such as the San Francisco Bay area. Other programs, such as CARB's Woodsmoke Reduction Program, target funds in primarily rural areas. In contrast, some programs, such as the California Department of Community Services and Development's Low-Income Weatherization Program, do not necessarily target a specific geographical area but rather target low-income households anywhere in the state.

Figure 7 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 at caclimateinvestments.ca.gov.

#### Figure 7: Cumulative Investments by County





# OUTREACH, TECHNICAL ASSISTANCE, & TRANSPARENCY

Improving outreach, providing technical assistance, and promoting transparency are key objectives of the California Climate Investments program. Collectively, these efforts are designed to help Californians learn about funding opportunities, ensure that communities have the resources and capacity they need to apply for funding, and enable the public to easily track how state programs are using these funds.

## Awareness and Outreach

Reaching priority populations is critical to the success of California Climate Investments. Administering agencies design programs to direct funding towards priority populations, meaningfully address their community-identified needs, and provide them with tangible benefits. In recent years, agencies have increasingly conducted outreach to expand the range of program awareness and involved communities in the many stages of program development and implementation.

Previously, these outreach and engagement activities have included traditional program workshops, bus tours across impacted neighborhoods, webinars and workshops, conferences convened by community and advocacy organizations, truck shows, festivals, presentations at tribal roundtables, and listening tours to hear community needs. However, in response to the COVID-19 pandemic and limitations on in-person gatherings, administering agencies have had to build on previous experience providing remote outreach and find new ways to engage with priority populations almost entirely through digital communications. Moving forward, California Climate Investments programs will be looking to continue to expand accessible digital outreach even as in-person activities resume. A complete list of each agency and program's outreach events in 2020 is available at caclimateinvestments.ca.gov/annualreport.





In addition to the efforts from individual administering agencies, CARB facilitates outreach for all California Climate Investments through a contract with the Foundation for California Community Colleges. The Foundation for California Community Colleges works to raise awareness of California Climate Investments funding opportunities in priority populations. As part of its work, the Foundation for California Community Colleges undertakes the following activities: operates a telephone hotline, social media accounts, and email for general questions about California Climate Investments; audits and improves the California Climate Investments website; produces and distributes educational materials and a bimonthly electronic newsletter; and operates the Student Ambassadors Program, which provides an opportunity for community college students to share information about California Climate Investments with their communities. To date, 21 Student Ambassadors have gone through the program since its launch in the spring of 2018.

## Student Outreach Ambassador Program, Fall 2020

As part of an outreach contract with CARB, the Foundation for California Community Colleges administers the California Climate Investments Student Outreach Ambassador Program (Ambassador Program). In 2020, with direction from Foundation staff, 13 Student Ambassadors at community colleges statewide helped educate students, faculty, and their communities about California Climate Investments programs. Thanks to this program, these students helped advance statewide environmental equity efforts while gaining professional experience in outreach and community engagement.

Julie, a Cerritos College student in the Fall 2020 Ambassador cohort, first learned about the Ambassador program through one of her campus advisors and later saw a posting about the program at her school's health center. "I was excited to join because I have always been interested in environmental issues and I wanted to make a difference in my community while earning some volunteer experience." One activity Julie enjoyed most was hosting virtual presentations to students and faculty: "I liked when students or faculty asked me questions. Answering people's questions just made me feel good about reaching out to the community and spreading the knowledge."

Overall, Julie enjoyed her experience as an Ambassador and would recommend the experience to other students. Julie recently transferred to the University of Meet Hannah! Southern California where she will be studying Business

Administration with hopes of one day becoming a Certified Public Accountant.

Hannah is a Fall 2020 Ambassador at Consumnes River College studying Geography and Environmental Studies and Sustainability. Hannah first learned about the Ambassador program from her sibling, who had heard about it from their Sociology professor at the college. "I was interested in becoming an ambassador because I believe environmental activism can be achieved through any type of media. I felt the ambassador program was a great way to get involved in my community, help others, and advocate for an organization and cause I believed in." During the program, Hannah found that she enjoyed sharing content using social media because, "it allowed me to reach more like-minded people."

**Meet Julie!** Attends Cerritos

Majoring in Business

Administration

College

Attends Cosumnes **River** College Majoring in Environmental Studies & Sustainability

Hannah also recommends the Ambassador Program to others: "It is a great start to learning how to get involved in the community and learn marketable skills that can last a lifetime." Hannah hopes to remain an environmental activist throughout her life and continue making strides in bringing about positive changes in society.

The Foundation provides additional support for outreach efforts of individual administering agencies, including developing and producing outreach materials, conducting surveys, and identifying potential applicants and stakeholders. For example, in 2020 the Foundation worked with the California High-Speed Rail Authority to design and conduct a survey to gather information from existing small business partners on whether they understand program requirements. The California High-Speed Rail Authority will use the results of the survey to proactively address identified concerns in order to continue progress against their 30 percent small business procurement goal.

The Foundation also worked with CARB staff to assist with the creation and distribution of a survey for the California Forest Management Task Force. The survey's focus was to allow the state to gain a better understanding of where land management organizations are located, their forest management and wildfire resilience priorities, and their capacity to scale up their current forest management and wildfire resilience efforts to help meet state goals. The survey was distributed to stakeholders of the Task Force in early 2021 and the Foundation will provide reports and analysis of responses back to the Task Force.

CARB staff have been increasingly working with the Foundation to focus outreach and support to priority populations that have not received funding for California Climate Investments projects. In 2020, the Foundation worked with CARB staff to launch a California Climate Investments webinar series designed to increase awareness of available funding opportunities. Each webinar focuses on a distinct audience that is eligible to apply for California Climate Investments programs and highlights current and upcoming funding opportunities, provides program overviews and contact information, and includes presenters from administering agencies as well as grantees. These 2020 webinars reached a total of 395 attendees, approximately 60 percent of whom had not previously applied to any California Climate Investments.ca.gov/webinars. California Climate Investments plans to continue this webinar series into 2021, including webinars directed towards federally and non-federally recognized California Tribal Governments and a webinar focused on funding opportunities for individuals produced in collaboration with GRID alternatives

For the last three years, Foundation staff have also used their relationship with community colleges to train operators of the state's 34 "Smog Check Referee" stations and at the Air Quality Call Center (which receives 60,000 calls per year) to inform people struggling to pass a smog check about funding available to buy a newer, cleaner vehicle. In addition, individuals who complete the Replace Your Ride program within the South Coast Air Basin receive an email highlighting opportunities with other California Climate Investments programs.

## **Technical Assistance and Capacity Building**

Potential funding applicants, particularly members of priority populations, often face challenges in accessing funding opportunities. Recognizing this disparity, the Legislature has appropriated a total of \$6.5 million to SGC for the California Climate Investments Technical Assistance program since 2015 to help local agencies and organizations serving priority populations apply for California Climate Investments programs – including, but not limited to, those administered by SGC. Additionally, SGC has leveraged a total of \$7 million to provide further technical assistance and capacity-building support to California communities.

The Technical Assistance program supports the technical assistance initiatives of several administering agencies. For example, in 2020, the program helped disadvantaged communities across the state apply for the Sustainable Transportation Equity Project. Thanks in part to those technical assistance

efforts, CARB received 34 proposals, requesting over \$108 million, as part of the program's first solicitation. On November 19, 2020, CARB announced \$19.5 million in awards. The Technical Assistance program will also help the awardees with project implementation. As another example, the Technical Assistance program helped the Arcata 30<sup>th</sup> Street Commons project become the first tribal-led project funded through the AHSC program. The Technical Assistance program connected the Yurok Indian Housing Authority and the City of Arcata with technical assistance providers that guided them through the complex process of developing the project and submitting a competitive application. Thanks in part to this support, SGC approved the project to receive \$11.4 million in June 2020. For more information on this project, read the full project profile located on page 131.

Outside of SGC's established Technical Assistance program, the Funding Guidelines encourage other agencies to set aside funds to provide direct technical assistance where needed. For example, in 2019, CARB used GGRF funds to support the development of the Access Clean California website (formerly known as the "One-Stop-Shop"), a statewide project administered by GRID Alternatives in partnership with the Greenlining Institute, program administrators, and community-based organizations across the state. Currently in its pilot phase, Access Clean California will provide easy and comprehensive access to CARB's equity-focused Low-Carbon Transportation programs and related benefits by pairing a robust network of community-based outreach partners with a seamless, user-centered program search application experience. Similarly, in response to stakeholder feedback, the California Department of Food and Agriculture used its own funding to support a network of Resource Conservation Districts, University of California's Cooperative Extension staff, and nonprofit organizations around the state to provide technical assistance on its GGRF-funded Climate Smart Agriculture programs, with 25 percent of those funds earmarked for socially disadvantaged farmers.

In 2020, the Strategic Growth Council published Technical Assistance Guidelines for State Agencies (TA Guidelines), as directed by SB 1072, which offer guidance and best practices to State agencies providing technical assistance and capacity building services.<sup>43,44</sup> The TA Guidelines are available in a web-based toolkit format to help users navigate the TA Guidelines, making it easier to find useful tools, tips, and best practices for designing and delivering effective technical assistance. State agencies are encouraged to consult this guidance in developing capacity building and technical assistance programs and strategies.

## **Interagency Cooperation on Outreach**

Administering agencies continuously work together and share resources to improve outreach and technical assistance. CARB and SGC's Technical Assistance program staff host the outreach liaisons workgroup, formed in 2015, which meets monthly to coordinate outreach efforts where appropriate, share lessons learned from experience, and build collective knowledge via presentations and discussions on a range of topics including language access, tribal and rural engagement, digital community engagement best practices and resources, different models of technical assistance, and more. As a result, staff are coordinating across programs to cohost, present, or provide information about multiple funding opportunities at workshops and outreach events.

Additionally, administering agencies meet quarterly to share administrative updates, information, and best practices that are relevant to all programs. Administering agencies also update a public events calendar, available at arb.ca.gov/ccievents/, with program milestones such as workshops, technical assistance events, and application deadlines to provide a single source for relevant program information.

<sup>43</sup> SGC's Technical Assistance Guidelines for State Agencies are available at sgc.ca.gov/programs/cace/resources/guidelines/

<sup>44</sup> SB 1072 (Chapter 377, Statutes of 2018)

## Accountability and Transparency

California continuously strives to increase transparency on the uses of Cap-and-Trade dollars. Administering agencies use the California Climate Investments Reporting and Tracking System to report data on program administration and implementation. This reporting system facilitates project-level data collection, data consistency, and greater public access to data. Beginning in 2018, CARB has collected project data semiannually, with a midyear reporting period in addition to an annual reporting period. With each reporting cycle, CARB publishes these data in several downloadable formats: the California Climate Investments Implemented Projects List (Project List), which contains a list of implemented projects; the California Climate Investments Historical Dataset, which contains all data collected for implemented projects; and the Project Map, which provides information on the locations of implemented projects and other project details.

In 2020, California Climate Investments launched the Data Dashboard in conjunction with the 2020 Annual Report. The Data Dashboard allows users to explore trends in funding, greenhouse gas emission reductions, and other project benefits across time and programs, further enhancing transparency. In addition, the California Climate Investments website now includes additional features that allow users to easily explore all of California Climate Investments project profiles.

These materials are hosted on a website that provides a user-friendly and accessible web presence for California Climate Investments. The website provides another venue for communicating California Climate Investments benefits, achievements, progress, and updates to the public. The website includes program pages that feature the achievements of individual programs, project profiles that highlight successful projects, upcoming agency events, and much more. The information in this and previous Annual Reports to the Legislature, as well as the Project Map, Project List, Historical Dataset, Data Dashboard, and Project Profiles pages are available at caclimateinvestments.ca.gov.





# PROGRAM STATISTICS & PROJECT PROFILES

The remainder of this report provides summary pages of the status of each California Climate Investments program that implemented projects in 2020 or has expended less than 90 percent of its overall funds, along with project profiles for select programs. Summary statistics on every California Climate Investments program can be found at *caclimateinvestments.ca.gov*. Additional information on individual implemented projects is also available via the California Climate Investments Project Map, Data Dashboard, and in a spreadsheet for download. Figure 3 defines the terms used in this report.

The summary pages include the following information for each program, where applicable:

- The total amount of funds available for the program to date ("appropriated" or "allocated");
- The total amount of funds implemented to date ("implemented");
- The amount of funds assigned to future projects that have been committed for investment but have yet to be implemented ("awarded");
- A high-level overview of the program including: administering agency, what type of projects are funded, how funds are distributed (competitive or first-come, first-served), who is eligible to receive funds, and how the funds reach priority populations;
- Estimated project lifetime greenhouse gas emission reductions from projects reported as implemented in 2020;
- · Co-benefits that are expected over the lifetime of projects reported as implemented in 2020; and
- SB 535 and AB 1550 benefits to priority populations from projects reported as implemented in 2020.<sup>45</sup>

Where applicable, intermediary administrative expenses are excluded from priority populations calculations. Percentages may not sum due to rounding.

<sup>45</sup> The program pages display benefits to priority populations as counted towards statutory investment minimums. Projects counted for a specific statutory investment minimum may provide benefits to more than one priority population, but these additional benefits are not shown to avoid double-counting.

## **Community Air Protection**

## **AB 617 Implementation Funds**

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$40.0 million appropriated.

How much has gone to implemented projects? \$20.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Funds support local air districts in the implementation of AB 617, such as supporting emissions reporting and the development and implementation of local strategies that air districts and communities identify through Community Emissions Reduction Programs.

#### How to access funds?

Local air districts receive funds from CARB to cover administrative costs of implementing AB 617.

#### Who receives funds?

The GGRF portion of AB 617 implementation funds was awarded to the South Coast Air Quality Management District, although a larger pot of additional non GGRF funds is also available and was awarded to other air districts for implementation.

## How does the program target funds and provide benefits to priority populations?

Air districts work with local residents to identify targeted emissions and exposure reduction actions for implementation in communities experiencing disproportionate air pollution impacts. Through engagement with community members and community based organizations, funding supports community engagement and outreach efforts, the purchase and deployment of air monitoring systems and data analysis, implementation of an expedited schedule for requiring best available retrofit control technology, targeted enforcement actions, and rule development.

## **2020 OUTCOMES**

\$20.0 M IMPLEMENTED

## FUNDING DISTRIBUTION

Funds benefiting priority populations are to be determined.

## **Community Air Protection**

## **Community Air Grants**

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$25.0 million allocated.

How much has gone to implemented projects? \$15.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Air Grants fund projects that provide support for California community-based organizations and California tribes.

#### How to access funds?

Apply to CARB's competitive statewide solicitation.

#### Who receives funds?

California community-based and nonprofit organizations and California tribal governments.

## How does the program target funds and provide benefits to priority populations?

Community air grant projects engage directly with disadvantaged and low-income community residents across California including in the San Joaquin and Eastern Coachella Valleys, Imperial, Bay Area, and Los Angeles. Residents learn about environmental laws, regulations, and policies, and how to engage in decision-making processes. California's disadvantaged and low-income residents also learn about regulatory and community air monitoring efforts, the impacts of air pollution, and how to limit exposure when air quality is unhealthy.

## **2020 OUTCOMES**

\$5.3 M IMPLEMENTED

## FUNDING DISTRIBUTION

\$4.2 M
TO BENEFIT PRIORITY POPULATIONS
21%
37%
37%
42%
disadvantaged communities
low-income communities & households
outside & benefiting disadvantaged communities

other areas of California

### CALIFORNIA AIR RESOURCES BOARD

## **Community Air Grants**

## South Central Los Angeles Project to Understand the Sources and Health Impacts of Local Air Pollution

Launched in January 2019, the South Central Los Angeles Project to Understand the Sources and Health Impacts of Local Air Pollution (SCLAPUSH) aims to help South Central LA organizations and community residents better understand the state of air quality and health in their community and engage in air monitoring and data analysis to advance community-driven solutions in air quality policy. The project was awarded \$300,000 by the AB 617 Community Air Grant Program and is led by Physicians for Social Responsibility–Los Angeles (PSRLA).



Air pollution in South Central LA emanates from a variety of stationary and mobile sources. These pollution sources regularly emit harmful gases and particles, often above health standard levels, which, combined with other socioeconomic and environmental determinants of health, significantly impact the health and wellbeing of South Central LA residents.

PSRLA SCLAPUSH Project Manager Paula Torrado recognizes the importance of reducing air pollution in these communities. "South Central LA communities continue to experience the health impacts of legacy air pollution and decades of environmental racism," she said. "Our communities cannot wait any longer for tangible solutions that tackle the root causes of pollution burden. That is why our SCLAPUSH project is working with community residents to codesign solutions that can protect the health of the community and foster a just transition."

One part of SCLAPUSH is the Air Quality Academy, an innovative two-day training session that helps community members learn the science of air pollution, the process of collecting data, the analysis of cumulative burden through ground-truthing, and processes for policy and regulatory change. The academy trained 70 community residents to be Air Quality Ambassadors who now understand their community's physical landscape and air monitoring data, and can engage in air quality policy decision making.

SCLAPUSH benefits from a wide set of collaborators, including three South Central LA organizations (Strategic Concepts in Organizing and Policy Education, Esperanza Community Housing Corporation, and Community Health Councils), academic partners from University of Southern California and Occidental College, technology consultant Peter Sinsheimer and design consultant Omar Ureta.

More information about SCLAPUSH can be found at www.sclapush.org/en.

## **Community Air Protection**

## **Community Air Protection Incentives**

### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$704.4 million allocated.

How much has gone to implemented projects? \$322.7 million implemented.

## **Program Description**

#### What types of projects are funded?

Air districts, in consultation with the community groups, select projects that meet their local needs. Incentives help owners of older, high polluting vehicles replace them with newer models that have near-zero or zero-emission technology. Grants also fund the replacement of dirty engines on marine vessels and off-road equipment to cleaner alternatives. Funding supports stationary source projects, such as local school facilities, to reduce toxic or smog forming pollutants and infrastructure projects such as zero emission charging stations. Community Air Protection Incentives also support local measures identified through AB 617.

#### How to access funds?

Apply to local air district competitive solicitations. Projects are selected in consultation with community groups.

#### Who receives funds?

Local air districts receive funds based on a formula and distribute them to individual projects.

## How does the program target funds and provide benefits to priority populations?

At least 55 percent of funds go to projects benefiting disadvantaged communities. Priority populations, particularly the communities most impacted by air pollution, benefit from reduced criteria and toxic air pollutant emissions.

## **2020 OUTCOMES**

\$120.6 M IMPLEMENTED

#### **EXPECTED BENEFITS**

46,733 MTCO, E GHG REDUCTIONS

5,371,241 GALLONS FUEL REDUCTIONS

6,198,052 POUNDS NO<sub>x</sub> REDUCTIONS

198,819 DIESEL PM REDUCTIONS

## FUNDING DISTRIBUTION

\$102.6 M





## CALIFORNIA AIR RESOURCES BOARD

## **Community Air Protection Incentives**

## **Twin Rivers Unified School District Fleet Electrification**

With delivery of 10 new Lion Electric all-electric school buses in December 2020, Twin Rivers Unified School District's (TRUSD) fleet of 40 zero-emission buses represents the largest deployment of zero-emission school buses in North America. Several California Climate Investments programs, including Community Air Protection Incentives, played a crucial role in reaching this major milestone.

The Sacramento Metropolitan Air Quality Management District combined \$100,000 in Community Air Protection incentives, \$220,000 from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project, and other local funds to help the school district pay for each new school bus. The investment totaled more than \$4 million for these 10 new school buses.

"The Sac Metro Air District is pleased to partner with Lion and Twin Rivers School District," said Sac Metro Air District Air Pollution Control Officer Alberto Ayala. "Together, we are at the cutting edge of school bus electrification, bringing zero-emission technology to protect our children, but also showing that electric vehicles are real, tangible alternatives to toxic diesel combustion engines."

The first battery-electric school buses in California were put into operation in 2016 at TRUSD in Northern Sacramento. Since then, the school district has continued to expand its fleet of zero-emission buses. Timothy Shannon, the district's director of transportation, is proud of the district's progress.

"We started down the road of electrification four years ago, and the reception has been unanimously positive," Shannon said. "Everyone from the drivers and maintenance staff, to the community, and most importantly students, have welcomed the possibilities of zero-emission buses and the health benefits that come with their adoption."

TRUSD is located within – and primarily serves – a disadvantaged community. "Thanks to California Climate Investments and other incentives, as well as manufacturers such as Lion Electric, school-kids here in Sacramento – and across California – are riding in the cleanest-running school buses on the market," former California Air Resources Board Deputy Executive Officer Steve Cliff said. "These investments mean cleaner air for our kids, and for communities that need it most."

To learn more about the TRUSD fleet visit, www.youtube.com/watch?v=StpnGrItO4E&feature=youtu.be.

## **Clean Cars For All**

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$102.0 million allocated.

How much has gone to implemented projects? \$73.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Financial incentives to retire older more polluting vehicles and replace them with newer cleaner advanced technology hybrid and zero-emission vehicles, or alternative mobility options.

#### How to access funds?

Apply to local air districts on a first-come, first-served basis.

#### Who receives funds?

Low-income residents within and near disadvantaged communities of the San Joaquin Valley, South Coast, Bay Area and Sacramento air districts.

## How does the program target funds and provide benefits to priority populations?

Program is designed with tiered incentive structure to provide maximum incentives to the lowest income participants purchasing or leasing the cleanest technology vehicles that reside within and near disadvantaged communities. This reduces health risks and transportation costs, and provides greater mobility and increased access to clean transportation to priority populations.

## **2020 OUTCOMES**

\$29.6 M IMPLEMENTED

#### **EXPECTED BENEFITS**

24,850 MTCO, E GHG REDUCTIONS

52,981 POUNDS NO<sub>2</sub> REDUCTIONS

9,339 POUNDS ROG REDUCTIONS

2,327 POUNDS PM<sub>2.5</sub> REDUCTIONS

### FUNDING DISTRIBUTION

\$24.8 M





## **Clean Mobility in Schools Project**

## CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$29.5 million allocated.

How much has gone to implemented projects? \$24.6 million implemented.

## **Program Description**

#### What types of projects are funded?

Scalable, clean transportation and mobility strategies, including electric vehicles and electric vehicle supply equipment in schools (K-12); car sharing for staff at schools to use zero-emission vehicles; and outreach to students, parents, and the community.

#### How to access funds?

Apply through a competitive statewide solicitation.

#### Who receives funds?

California public school districts and county offices of education that operate at least one school serving K-12 grades.

## How does the program target funds and provide benefits to priority populations?

In order to receive funding, projects must provide clean mobility options for schools serving priority populations.

## **2020 OUTCOMES**

\$24.6 M IMPLEMENTED

#### **EXPECTED BENEFITS**

10,013 MTCO, E GHG REDUCTIONS

164,917 POUNDS NO<sub>x</sub> REDUCTIONS

## **4,985** PM<sub>2.5</sub> <u>REDUCTIONS</u>

1,966 POUNDS PM<sub>2.5</sub> REDUCTIONS

## FUNDING DISTRIBUTION

## \$24.6 M



## CALIFORNIA AIR RESOURCES BOARD

## **Clean Mobility in Schools Project**

## Clean Mobility in El Monte Union High School District

Diesel particulate matter is a major contributor to our air pollution, and children across California can be exposed to it just by going to school. But thanks to \$9.8 million from California Climate Investments through the Clean Mobility in Schools Project, El Monte Union High School District in Los Angeles is able to reduce children's exposure to diesel particulate matter by purchasing battery electric school buses and charging infrastructure, energy storage infrastructure, developing an active transportation plan,



and much more – all across six high schools and one bus garage.

"This pilot project addresses the need to do more – beyond cleaning up school buses – to reduce exposure to harmful air pollution by children and others in and around schools. These projects will set up the schools to address climate change, reduce air pollution, and lead the next generation in learning about, and using, clean mobility options," California Air Resources Board Executive Officer Richard Corey said.

Diesel-powered engines like those used in school buses, landscape equipment, and custodial vehicles produce tiny, harmful airborne diesel particles, which can produce negative health effects in children and adults. As a mom in one of the most notoriously smoggy cities in the country, Nancy White Horse constantly worries about the air her 10-year-old daughter breathes: "I think about it especially when I have to pull out my own inhaler. As an asthmatic myself, who has recently been diagnosed with chronic bronchitis, I hope they never have to live their lives struggling to breathe like I do." She worries about her daughter's exposure to air pollutants from the diesel school buses and is a proponent of zero-emission electric school buses.

The Clean Mobility in Schools projects, which are located within disadvantaged communities, aim to reduce children's exposure to diesel particulate matter by encouraging and accelerating the deployment of new zero-emission school buses, school fleet vehicles, passenger cars, and lawn and garden equipment. The projects also support alter-native modes of transportation like transit vouchers, bike and pedestrian paths, and bicycle share programs.

## **Clean Mobility Options**

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received?

\$55.2 million allocated.

How much has gone to implemented projects? \$10.7 million implemented.

## **Program Description**

#### What types of projects are funded?

A variety of clean mobility projects (including car share, bike share, vanpool, and ride-sourcing) in disadvantaged communities using advanced clean vehicles (zero-emission or plug-in hybrid electric vehicles), associated infrastructure, and community transportation needs assessments.

#### How to access funds?

Apply through CALSTART on a first-come, first-served basis.

#### Who receives funds?

Pilot project administrators serving disadvantaged communities throughout California.

## How does the program target funds and provide benefits to priority populations?

All pilot projects are in or serve priority populations.

## **2020 OUTCOMES**

\$1.2 M IMPLEMENTED

## FUNDING DISTRIBUTION



## Clean Off-Road Equipment Voucher Incentive Project

### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$44.2 million allocated.

How much has gone to implemented projects? \$18.8 million implemented.

## **Program Description**

#### What types of projects are funded?

Vouchers toward the purchase of zero-emission and near zero-emission equipment used in off-road freight transport (such as forklifts, transport refrigeration units, gantry cranes, and terminal trucks).

#### How to access funds?

Apply on a first come, first served basis for vouchers at participating vendors and at *CaliforniaCORE.org*. Incentives applied at point of sale for the purchase of eligible equipment.

#### Who receives funds?

Public and private off-road equipment operators.

## How does the program target funds and provide benefits to priority populations?

Equipment deployed or domiciled in disadvantaged or low income communities is eligible to receive up to a 10 percent voucher enhancement on the base voucher amount Communities benefit from zero emission equipment offsetting the purchase of diesel equipment/vehicles that would have otherwise contributed to local air pollution.

## **2020 OUTCOMES**

\$18.8 M IMPLEMENTED

#### **EXPECTED BENEFITS**

12,740 MTCO, E GHG REDUCTIONS

1,205,312 GALLONS FUEL REDUCTIONS

58,841 POUNDS NO<sub>x</sub> REDUCTIONS

1,028 POUNDS PM<sub>2.5</sub> REDUCTIONS

## FUNDING DISTRIBUTION

## \$12.3 M



## Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)

### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$486.4 million allocated.

How much has gone to implemented projects? \$271.7 million implemented.

## **Program Description**

#### What types of projects are funded?

Promotes clean vehicle adoption by offering vouchers for the purchase of zero emission and plug-in hybrid trucks and buses, electric power take-off systems, and vehicles using engines that meet the optional low NO<sub>x</sub> standard.

#### How to access funds?

Apply on a first-come, first-served basis for vouchers at participating dealerships, manufacturers, and at *californiahvip.org*. Incentives applied at point-of-sale for the purchase of eligible vehicles.

#### Who receives funds?

Public and private operators of medium and heavy-duty truck and bus fleets.

## How does the program target funds and provide benefits to priority populations?

HVIP provides increased incentive amounts for vehicles located in disadvantaged communities as well as for public transits and school districts. HVIP funds reduce smog-forming pollutants and toxics by accelerating the deployment of clean advanced technology trucks and buses, with an emphasis in disadvantaged and low-income communities. The heavy-duty transformation supported by HVIP is also creating high-road jobs in advanced technology vehicle support and manufacturing.

## **2020 OUTCOMES**

\$76.4 M IMPLEMENTED

#### **EXPECTED BENEFITS**

202,291 MTCO, E GHG REDUCTIONS

11,799,860 GALLONS FUEL REDUCTIONS

1,078,763 POUNDS NO<sub>x</sub> REDUCTIONS

20,190 POUNDS PM<sub>2.5</sub> REDUCTIONS

## FUNDING DISTRIBUTION

## \$51.8 M



## **Clean Vehicle Rebate Project**

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$948.9 million allocated.

How much has gone to implemented projects? \$817.3 million implemented.

## **Program Description**

#### What types of projects are funded?

Rebates for the purchase or lease of new, eligible light-duty vehicles, including electric, fuel cell, and plug-in hybrid electric vehicles.

#### How to access funds?

First-come, first-served rebates available statewide; administered by the Center for Sustainable Energy at cleanvehiclerebate.org.

#### Who receives funds?

Individuals, businesses, and government entities.

## How does the program target funds and provide benefits to priority populations?

Outreach events targeting priority populations, as well as larger rebates for lower-income applicants and for public fleets located in disadvantaged communities.

## **2020 OUTCOMES**

\$90.7 M IMPLEMENTED

#### **EXPECTED BENEFITS**

178,769 MTCO, E GHG REDUCTIONS

26,726,505 GALLONS FUEL REDUCTIONS

40,373 POUNDS NO<sub>x</sub> REDUCTIONS

40,373 POUNDS PM<sub>2.5</sub> REDUCTIONS

## FUNDING DISTRIBUTION

## \$36.2 M



## Financing Assistance for Lower-Income Consumers

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$33.9 million allocated.

How much has gone to implemented projects? \$5.9 million implemented.

## **Program Description**

#### What types of projects are funded?

Offers lower-income consumers a low-interest loan and a vehicle price buy-down to purchase a new or used zero-emission, plug-in hybrid electric, or hybrid vehicle. Lenders are offered a loan loss reserve to mitigate their risk.

#### How to access funds?

Apply for first-come, first-served low-interest loans and buy-downs available at cleanvehiclegrants.org. Bay Area residents apply at communityhdc.org/transportationdepartment/.

#### Who receives funds?

Lower-income vehicle owners statewide.

## How does the program target funds and provide benefits to priority populations?

Outreach to disadvantaged communities to engage low-income residents in the program. Funds target income-eligible California residents statewide.

## **2020 OUTCOMES**

\$0.7 M IMPLEMENTED

#### **EXPECTED BENEFITS**

665 MTCO, E GHG REDUCTIONS

72,118 GALLONS FUEL REDUCTIONS

90 POUNDS NO, REDUCTIONS

125 POUNDS PM<sub>2.5</sub> reductions

## FUNDING DISTRIBUTION





## CALIFORNIA AIR RESOURCES BOARD

## Financing Assistance for Lower-Income Consumers

The Community Housing Development Corporation, a community-based organization in Richmond, received over \$6.5 million from California Climate Investments for a pilot project to assist with the purchase of newer, cleaner cars in low-income households in Sacramento and the Bay Area. The pilot project, known as Driving Clean Assistance Program, provides up to \$5,000 for hybrid or plug-in electric vehicle price buy-down and up to an additional \$2,000 for electric vehicle service equipment. The pilot enables low-income individuals and families, who would otherwise not qualify for a loan due to credit challenges,



to obtain a loan at competitive rates. This transformative initiative includes credit counseling, budget counseling, and financial education.

"I never thought that I would ever be able to afford a hybrid vehicle. Because of this program, I now have a reliable vehicle to get to work and I save gas and help the environment," said Anwar Hughes. With the help of Community Housing Development Corporation and the Financing Assistance Pilot Project, Anwar was able to purchase a clean, reliable vehicle.

This pilot project helps communities that are over burdened with poor air quality by swapping out older, polluting cars with more advanced cleaner cars. Another major benefit is that it offers a reliable mode of transportation for people like Anwar, who do not think they can afford an advanced clean car. Other project benefits for recipients include increased access to jobs, health care, education, and other everyday activities, while also helping achieve climate change goals.

The program's impact is compounded when it is combined with other grant programs for purchasing advanced clean cars, such as the Clean Vehicle Rebate Program and Clean Cars 4 All. After combining all of these benefits, it is often cheaper to purchase a cleaner vehicle over a standard gas vehicle with higher emissions.

## **Outreach, Education, and Awareness**

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$6.0 million allocated.

How much has gone to implemented projects? \$6.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Formerly known as The One-Stop-Shop Pilot Project, this project is a multifaceted outreach effort that helps streamline access to the state's consumer-facing, equity-focused clean transportation and clean energy incentive programs for low-income and disadvantaged communities. The project also helps to coordinate related outreach efforts across the state, provide technical assistance and capacity building for community-based organizations.

#### How to access funds?

Currently in its pilot phase, Access Clean California is streamlining the pathway to clean transportation funding and related benefits by pairing a robust network of community-based outreach partners in communities throughout the state, with a seamless, user-centered application experience that helps people get all the funding they qualify for, and into a clean transportation mode that works for them.

#### Who receives funds?

Access Clean California provides resources to nonprofits, CBOs and similar organizations to help families in low-income and disadvantaged communities learn about, apply for, and participate in clean transportation and clean energy incentive programs.

#### How does the program target funds and provide benefits to priority populations?

Access Clean California is an outreach effort aimed exclusively at priority populations to increase access to clean transportation and clean energy incentives programs. In addition, Access Clean California also provides technical assistance and capacity building grants to CBOs based in and representing priority populations.



**2020 OUTCOMES** 

## **Rural School Bus Pilot Projects**

### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$61.6 million allocated.

How much has gone to implemented projects? \$35.1 million implemented.

## **Program Description**

#### What types of projects are funded?

School bus fleet expansion with zero-emission buses and replacement of conventional-fuel buses with hybrid or conventional-fuel buses using renewable fuels.

#### How to access funds?

Apply through the North Coast Unified Air Quality Management District via competitive application process.

#### Who receives funds?

Public school districts, public charter schools, county offices of education, joint powers authorities, and the Division of State Special Schools in the State Department of Education.

## How does the program target funds and provide benefits to priority populations?

Funds reduce smog-forming and toxic pollutants by accelerating the deployment of cleaner school buses. Funds are prioritized based on location of a public school in designated small air districts that traditionally lacked the funding sources available to larger air districts for school bus replacement projects.

## **2020 OUTCOMES**

\$16.2 M IMPLEMENTED

#### **EXPECTED BENEFITS**

15,000 MTCO, E GHG REDUCTIONS

1,457,730 GALLONS FUEL REDUCTIONS

342,000 POUNDS NO<sub>x</sub> REDUCTIONS

4,920 POUNDS ROG REDUCTIONS

#### FUNDING DISTRIBUTION



## Sustainable Transportation Equity Project

#### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$19.5 million allocated.

How much has gone to implemented projects? \$0.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Community-driven planning, clean transportation, and supporting projects that increase transportation equity by addressing community residents' transportation needs, increasing residents' access to key destinations, and reducing GHG emissions.

#### How to access funds?

Apply through a competitive statewide solicitation.

#### Who receives funds?

Community-based organizations, federally-recognized tribes, and local governments (representing a broader coalition of community, public agency, and private partners).

## How does the program target funds and provide benefits to priority populations?

Projects must be in disadvantaged or low income communities, be designed to address community residents' transportation needs, and center residents' expertise through all phases of project implementation.

## **2020 OUTCOMES**

As of November 30, 2020, no projects have been reported as implemented. This program is expected to begin implementing projects in 2021.

## Fluorinated Gases Emission Reduction Incentives

### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$1.0 million appropriated.

How much has gone to implemented projects? \$0.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Installation, retrofit, or full/partial conversion to an ultra-low-global-warming-potential refrigerant and/or refrigeration system.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

California retail food businesses (or owner/operator of a retail food facility).

## How does the program target funds and provide benefits to priority populations?

Higher application scores are awarded to projects that are located within disadvantaged and low-income communities, and for providing jobs and job training opportunities for the proposed project.

## 2020 OUTCOMES

As of November 30, 2020, no projects have been reported as implemented. This program is expected to begin implementing projects in 2021.

## Funding Agricultural Replacement Measures for Emission Reductions

## CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$250.8 million appropriated.

How much has gone to implemented projects? \$150.4 million implemented.

## **Program Description**

## What types of projects are funded?

Agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations.

#### How to access funds?

Apply to local air district competitive solicitations. Projects are selected by local air districts.

## Who receives funds?

Local air districts receive funds based on a formula and award them to farmers and agricultural businesses for individual projects.

## How does the program target funds and provide benefits to priority populations?

Funding is directed to local air districts with higher concentrations of disadvantaged communities. Dedicated staff assist with disadvantaged community and low-income household outreach and help ensure these communities are aware of funding opportunities. Further, CARB is committed to working with local air districts to provide technical assistance to small growers in priority populations to ensure all FARMER program requirements are sufficiently met. CARB ensures at least 50 percent of funds go to projects benefiting disadvantaged communities and five percent of funds go to projects benefiting low-income communities.

## **2020 OUTCOMES**

\$86.3 M IMPLEMENTED

### **EXPECTED BENEFITS**

53,371 MTCO, E GHG REDUCTIONS

> 827,841 PM<sub>2.5</sub> reductions

13,623,381 POUNDS NO<sub>x</sub> REDUCTIONS

897,596 Diesel PM reductions

## FUNDING DISTRIBUTION

## \$61.1 M





## CALIFORNIA AIR RESOURCES BOARD

# Funding Agricultural Replacement Measures for Emission Reductions

## Heavy-Duty, Off-Road, Tractor Trade-up Projects

The Funding Agricultural Replacement Measures for Emission Reductions (FARMER) program provides up to 80 percent of funding for agricultural vehicle and equipment replacement and repower projects. Thanks to this program, Jannifer Mytych and AgriWorld Cooperative were approved by the San Joaquin Valley Air Pollution Control District to receive California Climate Investment funds for new tractors to help reduce emissions while maintaining their almond farms. Jannifer is now the new owner of a Tier 3, 2011 John Deere tractor, and AgriWorld Cooperative is the new owner of a Tier 4 final, John Deere tractor.

For off-road mobile agricultural equipment trade-up projects, small farmers are eligible to scrap their old, high-polluting tractors in exchange for a much cleaner, reconditioned, used tractor with minimal out-of-pocket costs. The used equipment generally comes from a larger farmer who purchases a new tractor with the cleanest engine technology available.

This project type is designed for people like Jannifer, who needed a newer tractor after she replanted a small almond orchard in 2017. It would have been too costly to purchase a new tractor, so with the assistance of Midland Tractor Company in Madera County she partnered with AgriWorld Cooperative to submit a project application to the San Joaquin Valley Air Pollution Control District's off-road mobile agricultural equipment trade-up program.

After using her newly refurbished Tier 3 tractor for some time, Jannifer reached out to the San Joaquin Valley Air Pollution Control District to provide positive feedback about the program: "Using this tractor is such a big difference from what we had. I am not driving a smoky leaky tractor that is hard to steer. I do not have any problems pulling anything. It is a total joy! Greatest of all, the project was very seamless and working with this program has been easy. I am glad I had the opportunity to participate."

## Prescribed Fire Smoke Monitoring Program

## CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$7.2 million allocated.

How much has gone to implemented projects? \$3.9 million implemented.

## **Program Description**

## What types of projects are funded?

Smoke monitoring and research to help optimize existing prescribed burn programs in support of the California Forest Carbon Plan. Increased public awareness, including development of a mobile app, will alert citizens to nearby burn treatments and provide information on the health impacts of smoke and how to minimize them.

#### How to access funds?

Assistance grants may be available through local air districts. Research and private contracts are based on a competitive application process through CARB. Public grants are based on documented opportunity and capability to demonstrate increased prescribed burning at the local and regional level in a manner that protects public health.

#### Who receives funds?

Federal agencies, state agencies, local public agencies, research institutions, and private consultants.

## **2020 OUTCOMES**

\$1.6 M IMPLEMENTED

## FUNDING DISTRIBUTION



## **Woodsmoke Reduction Program**

### CALIFORNIA AIR RESOURCES BOARD (CARB)

## **Cumulative Funding**

How much funding has the program received? \$8.0 million appropriated.

How much has gone to implemented projects? \$6.8 million implemented.

## **Program Description**

#### What types of projects are funded?

Vouchers or rebates for the replacement of uncertified residential wood burning stoves, inserts, and fireplaces used for primary space heating with cleaner, more efficient home heating devices.

#### How to access funds?

Apply through local air districts on a first-come, first-served basis, with preference to priority populations. Administered via California Air Pollution Control Officers Association and local air districts.

#### Who receives funds?

Households using uncertified wood stoves or wood inserts, or utilizing a fireplace as a primary heat source.

## How does the program target funds and provide benefits to priority populations?

Larger incentives provided for members of priority populations, as well as outreach targeting these residents and prioritization of applicants from these populations at the regional and local air district level.

## **2020 OUTCOMES**

\$1.6 M IMPLEMENTED

#### **EXPECTED BENEFITS**

19,908 MTCO<sub>2</sub>E GHG REDUCTIONS

> 776,593 PM<sub>2.5</sub> reductions

97,093 BLACK CARBON REDUCTIONS

1,131,331 POUNDS ROG REDUCTIONS

#### FUNDING DISTRIBUTION

## \$1.5 M


## **Low-Income Weatherization**

Farmworker Housing Component: Single-Family Energy Efficiency and Solar Photovoltaics (PV)

# CALIFORNIA DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT (CSD)

## **Cumulative Funding**

How much funding has the program received? \$10.8 million allocated.

How much has gone to implemented projects? \$6.7 million implemented.

## **Program Description**

### What types of projects are funded?

Direct installation of energy efficiency measures, solar water heating, and solar PV systems for farmworker dwellings (within 12 eligible counties) at no cost to residents.

### How to access funds?

Farmworker households apply through a first-come, first-served process. For more information call (833) FORLIWP. Assistance is available in English, Spanish, and other languages.

#### Who receives funds?

Income-qualifying farmworkers within the 12 eligible counties.

# How does the program target funds and provide benefits to priority populations?

CSD targets energy efficiency measures and rooftop solar PV to low-income farmworker households in the 12 counties with the largest farmworker populations. Households benefit from reduced energy costs as well as lighting and appliance upgrades and improved home energy efficiency and thermal comfort.

# **2020 OUTCOMES**

\$5.6 M IMPLEMENTED

#### **EXPECTED BENEFITS**

7,229 MTCO, E GHG REDUCTIONS

12,983,669 KWH ENERGY GENERATION

6,309 POUNDS NO<sub>x</sub> REDUCTIONS

13,446,982 GALLONS WATER SAVINGS

## FUNDING DISTRIBUTION

\$4.3<sup>46</sup> M

TO BENEFIT PRIORITY POPULATIONS



<sup>46</sup> Due to an error, this value does not reflect an additional \$0.3M in benefits to priority populations. Including these additional benefits, 61% of project dollars are benefiting disadvantaged communities, and 39% of project dollars are benefiting low-income communities or households.

# **Low-Income Weatherization**

# Multi-Family Energy Efficiency and Renewables

# CALIFORNIA DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT (CSD)

## **Cumulative Funding**

How much funding has the program received? \$63.9 million allocated.

How much has gone to implemented projects? \$37.2 million implemented.

## **Program Description**

### What types of projects are funded?

Technical assistance and incentives for the installation of energy-efficiency measures and solar PV in low-income multifamily dwellings in disadvantaged and other communities.

#### How to access funds?

Apply for first-come, first-served incentives through the Association for Energy Affordability at camultifamilyenergyefficiency.org.

#### Who receives funds?

Owners of low-income multi-family properties in disadvantaged and other communities.

# How does the program target funds and provide benefits to priority populations?

CSD targets services and funding to affordable multi-family housing developments, both in disadvantaged communities and elsewhere. Low-income residents benefit from reduced energy costs as well as lighting and appliance upgrades and improved building energy efficiency and thermal comfort. The program administrator conducts outreach to potential applicants in disadvantaged communities and other communities.

# **2020 OUTCOMES**

\$7.9 M IMPLEMENTED

### **EXPECTED BENEFITS**

29,197 MTCO, E GHG REDUCTIONS

> 25,016,192 KWH ENERGY SAVINGS

31,606,228 KWH ENERGY GENERATION

96,168,379 GALLONS WATER SAVINGS

## FUNDING DISTRIBUTION

# \$5.9 M

TO BENEFIT PRIORITY POPULATIONS



## DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT

# Multi-Family Energy Efficiency and Renewables

## **SOMA Studio & Family Apartments**

The Tenderloin Neighborhood Development Corporation's (TNDC) commitment to help San Francisco's low income communities thrive by building affordable housing was energized by an electrification project at its SOMA Studio and Family Apartments (SOMA Apartments) in 2020. The effort is supported by a \$633,000 award from California Climate Investments through the Department of Community Services and Development's Low-Income Weatherization



Program's (LIWP) Multi-Family component. With that money and contributions from other local energy efficiency programs, TNDC kept utility bills low for residents while electrifying major central building systems and reducing greenhouse gas emissions. Built in 2003, the SOMA Apartments include 162 homes with more than 60 percent of its households classified as extremely low income (earning less than 30 percent of the area median income).

Without the award, the SOMA Apartments project scope would have been limited to lighting upgrades. With the assistance of LIWP, TNDC was able to take a whole building approach to energy efficiency and integrate various electrification measures as part of the retrofit including installation of a 74 kilowatt solar photovoltaic system to help offset the electricity load in the apartments' common areas. The SOMA Apartments and its residents can count on energy savings of more than 40 percent with a projected annual savings of \$48,000.

TNDC's Senior Sustainability Manager Ruchi Shah stated, "When we started this project, LIWP was the only program that funded electrification and fuel switching measures. They provided an exhaustive list of measures and, more importantly, their team spent three to four months coming up with



preliminary pricing to help identify a contractor, an offering no other energy program has provided. Without LIWP, this work would have been challenging, if not impossible"

Apartment tenants only pay for in unit electricity, which is limited to lighting and appliances, while TNDC pays for water and central heating. To further reduce tenant utility bills, LIWP helped cover in unit light bulb replacements to provide direct savings to tenants and brighten up common spaces without increasing electricity costs. TNDC also electrified domestic hot water with heat pump water heaters and installed hydronic heating boilers.

TNDC has committed to reducing carbon emissions by 50 percent from a 2018 baseline by 2028. Building electrification and decarbonization efforts like those supported by LIWP are key strategies for meeting this goal.

## **Sustainable Forests**

## **Fire Prevention Grants Program**

## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

## **Cumulative Funding**

How much funding has the program received? \$235.2 million allocated.

How much has gone to implemented projects? \$156.6 million implemented.

## **Program Description**

### What types of projects are funded?

Hazardous fuel removal, fire prevention public education, fire prevention and wildfire safety planning, and defensible space inspections.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Nonprofit organizations, local agencies, tribes, Fire Safe Councils, and resource conservation districts.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting priority populations receive enhanced application scoring. Priority population communities benefit through a reduction in fire risk.

# **2020 OUTCOMES**

\$43.4 M IMPLEMENTED

### **EXPECTED BENEFITS**

18,275 ACRES TREATED/RESTORED

> 4 EDUCATION EVENTS

5 FIRE PREVENTION PLANS

## FUNDING DISTRIBUTION



TO BENEFIT PRIORITY POPULATIONS



outside & benefiting
 disadvantaged communities

other areas of California



## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

# **Fire Prevention Grants Program**

## Elk Creek Fuel Break

The Elk Creek Fuel Break, one of the 35 emergency fuel reduction projects prioritized in the Governor's 2019 Community Wildfire Prevention and Mitigation Report, was completed in part with \$325,000 in California Climate Investments funds. California Department of Forestry and Fire Protection implemented the project to protect lives, property, and valuable agricultural resources in the communities of Elk Creek and Stonyford, which are adjacent to the Mendocino National Forest. During the 2020 Butte/Tehama/Glenn Lightning Complex Fire, the Elk Creek Fuel Break helped contain the fire with eight miles of fire line.

In the eight years prior to this project's implementation, the Elk Creek and Stonyford communities had been impacted by four major, fast-moving fires. Knowing this, the goal of the project was to slow and stop future fires, to protect communities and reduce greenhouse gas emissions in the treated areas. When wildfires impacted these communities again in 2020, the Elk Creek Fuel Break allowed for improved access to the road system and slowed the spread of the fire, which made it easier to put the fires out.

Dawn Pedersen, a California Department of Forestry and Fire Protection forester, described how much the Elk Creek Fuel Break benefited fire suppression efforts in these communities: "This project was strategically placed on the landscape to stop the spread of slow-moving fires that originate on Federal Responsibility Areas from becoming established on State Responsibility Areas and vice-versa. The constructed fuel break performed as it was designed. A lightning-caused fire that originated in the Mendocino National Forest was slowed sufficiently to allow suppression resources to take advantage of the fuel break and secure an anchor point from which to stop the fire from destroying the communities of Elk Creek and Stonyford. In addition, the Stony Gorge Hydroelectric Power Dam and Power Substation, as well as hundreds of acres of valuable grazing lands, were saved from this destructive fire."

# **Sustainable Forests**

# **Forest Health Program**

### CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

## **Cumulative Funding**

How much funding has the program received? \$345.6 million allocated.

How much has gone to implemented projects? \$317.8 million implemented.

## **Program Description**

#### What types of projects are funded?

Reforestation, fuels reduction, pest management, conservation easements, workforce development, forest biomass utilization, and bioenergy development.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Nonprofit organizations, State and local agencies, tribes, private forest landowners, and conservation districts.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting priority populations receive enhanced application scoring. Priority population communities benefit through a reduction in fire risk, conservation and restoration of public forest lands, protection of watersheds, and job opportunities.

# **2020 OUTCOMES**

\$70.9 M IMPLEMENTED

#### **EXPECTED BENEFITS**

1,082,409 MTCO, E GHG REDUCTIONS

**48,353** ACRES TREATED/RESTORED

**446,648** TREES FOR REFORESTATION

**37,783,800** KWH ENERGY GENERATION

## FUNDING DISTRIBUTION

# \$30.3 M

TO BENEFIT PRIORITY POPULATIONS





## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

## **Forest Health Program**

## **Upper Pit River**

In collaboration with forest industry and utility partners and the Modoc National Forest, the Pit Resource Conservation District is implementing a \$5 million California Climate Investments Forest Health grant to increase forest resilience in Modoc County. The fuels reduction and prescribed fire activities funded by this project will take place on public and private lands to increase forest resilience, accelerate reforestation of severely burned forests, and reduce the risk of future catastrophic fire impacts to local communities, ecosystems, and natural resources. This project complements efforts by state, federal, and local agencies to increase the pace and scale of fuel treatments in California's forests.

Decreasing forest density and reducing surface fuels are key steps towards building a resilient landscape in this region. The U.S. Forest Service and the Pit Resource Conservation District designed approximately 6,500 acres of fuels reduction treatments meant to restore forest structure and facilitate the widespread use of prescribed fire by removing biomass, thinning vegetation, and shifting plant life towards more drought and fire tolerant species. Thinning treatments will also help reduce tree competition for limited water and nutrients, thereby reducing the risk of greenhouse gas emissions from insect and disease caused tree mortality. Construction of a ridge top shaded fuel break will protect two subdivisions in Modoc County and three high voltage transmission lines.

Prescribed burns are being used to maintain the benefits of widespread thinning and to begin restoring fire as a natural process in forests throughout the project area. Prescribed burning is designed to create favorable conditions across the landscape at scale that helps reduce the risk of catastrophic wildfire and poor air and water quality. If fires do occur, fire size and severity will be reduced, resulting in reduced greenhouse gas emissions when compared to fires in untreated forests.

Wood chips generated from the project are also being utilized by local biomass facilities to generate energy and reduce fossil fuel consumption. These local facilities provide employment opportunities in the adjacent rural, low-income communities. Benefits extend to local commerce and tax revenues.

Modoc Forest Supervisor Chris Christofferson greatly appreciates this project: "The [grant] has proven to be invaluable. It has resulted in more intentional conversations and the development of focused partnerships designed to make our forest communities and safer places to live and recreate."

# **Sustainable Forests**

# **Forest Health Research**

### CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

## **Cumulative Funding**

How much funding has the program received? \$5.5 million allocated.

How much has gone to implemented projects? \$5.4 million implemented.

## **Program Description**

#### What types of projects are funded?

Research projects investigating priority topics on forest health and wildfire, in support of California Forest Carbon Plan implementation.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Universities and academic institutions, local agencies, state agencies, federal agencies, tribes, private forest landowners, and non profit organizations including fire safe councils and land trusts.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting priority populations receive enhanced application scoring. Priority population communities benefit through educational events provided to K-12 schools or non-profit organizations.

# **2020 OUTCOMES**

\$3.0 M IMPLEMENTED





## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

# **Forest Health Research**

## Keeping Fire on the Landscape: Maintaining Carbon Balance and Forest Resilience

At the University of California's Blodgett Forest Research Station in the central Sierra Nevada Mountains, the long running Fire and Fire Surrogate study has provided critical information to forest managers and landowners on the use of prescribed fire and restoration thinning. With a \$454,772 grant from California Climate Investments through the California Department of Forestry and Fire Protection's Forest Health Research Program, Dr. John Battles, Dr. Scott Stephens, and other researchers are continuing this important work with an eye towards understanding the value of repeated application of fuel reduction treatments on Sierra Nevada mixed-conifer forests. Forest managers and landowners throughout the state and beyond will be able to use the results of this study to inform their management actions and policy decisions in the face of warming climate and increasing wildfires.

In the wake of the historic 2020 wildfire season in which more than 4 million acres burned in California, the state is redoubling its efforts to increase the pace and scale of management to reduce fire hazards and improve forest resilience. Forests play an important role in the state's strategies for mitigating climate change. Intact forests store large amounts of carbon, but when disturbed by wildfires and drought, they can release carbon via smoke emissions and decomposition. While there is broad agreement that fuel treatments can reduce fire hazards and provide other co benefits, their effects on carbon storage and stability, especially with repeat application, are still being investigated

"We need to understand the joint trajectory of carbon accumulation and fire hazard under different treatment regimes," says Principal Investigator Dr. John Battles. "With the support of this Forest Health Research Program grant, we will be able to complete the most comprehensive, on-the-ground record of forest treatments and their impacts on carbon and resilience." These efforts include a full accounting of the treatment effects on forest carbon storage as well as a detailed analysis of tree growth responses.

Daniel Duane from Wired Magazine (September 2020), reported after seeing with the effects of the study's repeated application of prescribed fire "that a forest, when allowed to burn the way it evolved to burn, feels wonderful, a sun-dappled gallery of enormous sugar pine, Douglas-fir, and black oak shading meadow-like ground at once sheltered from weather but open enough to move freely."

For more information on the Fire and Fire Surrogate Study, visit Blodgett Fire and Fire Surrogate Study.<sup>47</sup>

<sup>47</sup> Duane, Daniel. Wired. "The West's Infernos Are Melting Our Sense of How Fire Works" September 30, 2020. www.wired.com/story/west-coast-california-wildfire-infernos/. Accessed February 19, 2021.

## **Sustainable Forests**

Urban and Community Forestry Program

## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

## **Cumulative Funding**

How much funding has the program received? \$77.8 million allocated.

How much has gone to implemented projects? \$56.2 million implemented.

## **Program Description**

### What types of projects are funded?

Urban forest expansion, management, and improvement, and utilization of urban tree waste for wood products and bioenergy.

How to access funds?

Competitive application process.

#### Who receives funds?

Local government agencies and nonprofit organizations.

# How does the program target funds and provide benefits to priority populations?

The program funds street tree planting and maintenance with a minimum of 80% of implemented funding targeting disadvantaged communities. Street trees reduce the urban heat island effect, which improves neighborhood quality of life and public health.

# **2020 OUTCOMES**

\$3.4 M IMPLEMENTED

#### **EXPECTED BENEFITS**

20,798 MTCO, E GHG REDUCTIONS

> 2,462,451 KWH ENERGY SAVINGS

> > 15,519 TREE PLANTINGS





CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

# **Urban and Community Forestry Program**

## Urban Salvaged and Reclaimed Woods, Inc., Urban Wood and Biomass Utilization

A \$996,600 grant from California Climate Investments through the Urban and Community Forestry program will help Urban Salvaged and Reclaimed Woods, Inc. (USRW) pilot a shared storefront project. This storefront will allow businesses handling salvaged wood from urban areas to combine resources to better process, market, and sell their products.

A significant number of mature trees are removed annually due to health issues and infrastructure projects such as road construction and development. Most of these trees are transported to a landfill to decompose and release their stored greenhouse gases, resulting in a large loss of what could be construction lumber and craft wood. USRW has been working on keeping these trees out of the waste stream by creating networks, educating consumers and tree care companies, and developing an avenue to give these trees a second life.

With a previous grant, USRW developed a standardization for the urban wood industry chain-ofcustody for sourcing, transporting, processing, drying, and selling the wood. Having standards informs the consumer while also facilitating the use of good ethical practices by urban wood businesses. As urban wood utilization becomes more interesting to the industry and the public, businesses nationwide have accepted the USRW Standards. However, smaller businesses find themselves needing a storefront location to warehouse or sell their products. By providing this storefront, USRW is helping to optimize the amount of urban wood being used while supporting the success of these small businesses. The storefront will also provide a shared location where consumers can receive information about the wood they are purchasing and feel confident in the product.

Overall, USRW will salvage over 1,000 mature urban trees annually that were felled for reasons other than their wood. Those trees can then be made available for their wood/lumber. The project will also plant and maintain 200 public trees in or near disadvantaged communities in the greater Sacramento and Stockton areas.

# Community Fire Planning and Preparedness

## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

## **Cumulative Funding**

How much funding has the program received? \$10.0 million appropriated.

How much has gone to implemented projects? \$0.2 million implemented.

## **Program Description**

## What types of projects are funded?

Fire prevention and preparedness grants, maintenance of evacuation routes, cooperative extension fire advisors, and land use planning training and recommendations.

## How to access funds?

Legislative appropriation.

## Who receives funds?

Local agencies and State agencies.

# How does the program target funds and provide benefits to priority populations?

Priority population communities benefit through a reduction in fire risk. CAL FIRE will ensure these communities benefit through targeted outreach.

# **2020 OUTCOMES**

\$0.2 M IMPLEMENTED

## **EXPECTED BENEFITS**

14 EDUCATION EVENTS



## **Fire Prevention Program**

## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

## **Cumulative Funding**

How much funding has the program received? \$278.1 million allocated.

How much has gone to implemented projects? \$161.6 million implemented.

## **Program Description**

### What types of projects are funded?

This includes a variety of fire prevention services and programs in the State Responsibility Area, including defensible space inspections, helping communities create and update Community Wildfire Protection Plans, fire prevention education, fire hazard severity mapping, implementation of the State and local fire plans, fire-related law enforcement activities such as arson investigation fuels reduction projects that reduce the risk of wildfire to communities, evacuation routes, and infrastructure.

#### How to access funds?

Legislative appropriation.

#### Who receives funds?

CAL FIRE. This appropriation directly funds state operations.

# How does the program target funds and provide benefits to priority populations?

Some CAL FIRE units that receive program funds are located in and provide benefits to priority population communities.

# **2020 OUTCOMES**

\$61.5 M IMPLEMENTED

## FUNDING DISTRIBUTION

\$41.7 M
TO BENEFIT PRIORITY POPULATIONS
32%
32%
65%
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other areas of California

## **Forest Carbon Plan Implementation**

## CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

## **Cumulative Funding**

How much funding has the program received? \$89.5 million allocated.

How much has gone to implemented projects? \$42.2 million implemented.

## **Program Description**

## What types of projects are funded?

CAL FIRE created ten crews of wildland fire professionals dedicated to increasing the pace and scale of fuel reduction and land restoration treatments in support of the California Forest Carbon Plan. These crews are located around the State and conduct prescribed burns and other fuel reduction treatments to help protect communities from wildfires, create healthier and more climate-resilient ecosystems and watersheds, and stabilize carbon stored in natural lands. Funds also support prescribed fire monitoring to provide ongoing assessment of fire hazard reduction and effects of treatments on ecosystems.

## How to access funds?

Legislative appropriation.

## Who receives funds?

CAL FIRE. This appropriation directly funds state operations.

# **2020 OUTCOMES**

\$30.0 M IMPLEMENTED

## **EXPECTED BENEFITS**

2,010 ACRE RESTORATION

10 PRESCRIBED FIRE CREWS

53 FUEL TREATMENT PROJECTS



## **Waste Diversion**

# Community Composting for Green Spaces Grant

### CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

## **Cumulative Funding**

How much funding has the program received? \$1.4 million allocated.

How much has gone to implemented projects? \$0.0 million implemented.

## **Program Description**

#### What types of projects are funded?

This program will fund community groups to create new, or expand the capacity of, small-scale composting programs in green spaces within disadvantaged and low-income communities. Green spaces may include community gardens, urban farms, and other public spaces where small=scale composting is appropriate.

#### How to access funds?

Competitive application process.

#### Who receives funds?

Local governments, nonprofit organizations, for-profit entities, state and federal agencies, public universities and colleges, solid waste facilities, public school districts, and qualifying tribes.

# How does the program target funds and provide benefits to priority populations?

Projects located in disadvantaged communities are prioritized during application scoring. Projects will promote communitybased activities to increase organic material diversion in disadvantaged and low-income communities. Projects will also fund employment and training opportunities for priority populations.

# 2020 OUTCOMES

As of November 30, 2020, no projects have been reported as implemented. This program is expected to begin implementing projects in 2021.

## **Waste Diversion**

Food Waste Prevention and Rescue Grants

### CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

## **Cumulative Funding**

How much funding has the program received? \$24.7 million allocated.

# How much has gone to implemented projects? \$20.2 million implemented.

## **Program Description**

### What types of projects are funded?

Projects that prevent the generation of food waste that would otherwise be disposed in California landfills through source reduction activities and distribution of food to communities. All projects are also required to have food waste residuals be composted or digested, when available.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Local governments, nonprofit organizations, for-profit entities, state public universities and colleges, solid waste facilities, public school districts, and qualifying tribes.

# How does the program target funds and provide benefits to priority populations?

Rescued food is used to feed members of low-income communities and households. Projects benefiting disadvantaged and low-income communities through education and outreach, job creation, and job training receive additional points during application scoring.

# **2020 OUTCOMES**

No projects were implemented in 2020, additional implemented projects are forthcoming.



## CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

## **Food Waste Prevention and Rescue Grants**

## Hope 4 the Heart

Twenty years ago, Hope 4 the Heart began providing food rescue services to their Hayward, California community and surrounding areas. In 2019, they received \$329,766 from California Climate Investments through the Food Waste Prevention and Rescue Grant Program.

Hope 4 the Heart used their Food Waste Prevention and Rescue Grant Program funds to purchase a 26-foot refrigerated delivery truck, a forklift and warehouse handling equipment, and a walk-in refrigerator for their 5,000 square foot facility. As a result, more than 2.4 million pounds of donated food was diverted from landfills, and an important food rescue network in the underserved Southern Alameda County area was given an opportunity to grow.

Hope 4 the Heart now brings food security to more than 20,000 Alameda County residents every month and provides work rehabilitation and job training services to many nonprofit community and court-referral volunteers. The project has already surpassed its emissions reduction target and has reduced 2,146 metric tons of carbon dioxide equivalent to date.

The food Hope 4 the Heart rescues is donated by a growing network of local organizations including Safeway, Costco, Walmart, Whole Foods, San Francisco Specialty, Vesta, and other restaurant and retail food warehouses and stores. One donor, Chefs to End Hunger, <u>www.chefsendhunger.org</u> provided Hope 4 the Heart with 1,253,420 pounds of surplus food in 2019.

California's StopWaste.org also supports Hope 4 the Heart and has recognized the group as a key stakeholder since 2014 in StopWaste.org's work to reduce food waste in Alameda County. "Year after year, [Hope 4 the Heart] is able to increase the amount of individuals and families served, onboard new donors, and rescue additional food for re-distribution. Hope 4 the Heart has been a vital partner in expanding the County's capacity for recovery of surplus prepared food, which [the organization is] uniquely equipped to handle."

## **Waste Diversion**

# Organics and Recycling Manufacturing Loans

## CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

## **Cumulative Funding**

How much funding has the program received? \$9.2 million allocated.

How much has gone to implemented projects? \$7.7 million implemented.

## **Program Description**

### What types of projects are funded?

Loans to fund construction, renovation, or expansion of facilities for preprocessing, digesting, or composting organics, or the preprocessing or manufacturing of value-added finished products using recycled fiber, plastic, or glass.

#### How to access funds?

Applications are considered on a first-come, first-served basis.

#### Who receives funds?

Local governments, nonprofit organizations, for-profit entities.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged and low income communities receive preferential points during application scoring. Projects benefit communities through diversion of waste from disadvantaged communities, textile rescue to disadvantaged communities, job creation, and job training.

# **2020 OUTCOMES**

\$2.0 M IMPLEMENTED

#### **EXPECTED BENEFITS**

86,585 MTCO<sub>2</sub>E GHG REDUCTIONS

> 18,742 TONS WASTE DIVERSION

1,318 POUNDS REACTIVE ORGANIC

GAS REDUCTIONS



## **Waste Diversion**

## **Organics Grants**

## CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

## **Cumulative Funding**

How much funding has the program received? \$75.4 million allocated.

How much has gone to implemented projects? \$72.5 million implemented.

## **Program Description**

### What types of projects are funded?

The construction, renovation, or expansion of facilities to preprocess, digest, or compost organics into compost, soil amendments, biofuels, or bioenergy.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Local governments, nonprofit organizations, for profit entities, state and federal agencies, public universities and colleges, solid waste facilities and regional authorities or local sanitation districts, public school districts, and qualifying tribes.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged and low income communities receive additional points during application scoring. Projects benefit communities through diversion of waste from disadvantaged communities, rescued food to residents, job creation, and job training. To target funds to rural populations, the rural project with the highest passing score is guaranteed funding.

# **2020 OUTCOMES**

\$15.8 M IMPLEMENTED

#### **EXPECTED BENEFITS**

26,460 MTCO, E GHG REDUCTIONS

> 128,968 TONS WASTE DIVERSION

9,763 POUNDS REACTIVE ORGANIC GAS REDUCTIONS





## CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

# **Organics Grants**

## **SANCO** Anaerobic Digestion Project

SANCO Services received \$3 million from California Climate Investments through the Organics Grants program to help fund equipment vital to the operation of a new anaerobic digestion system under construction at the Escondido Resource Recovery Transfer Station.

When completed, the station will be one of the most advanced facilities in California and will reduce 1,162 truck trips between the transfer station and the landfill per year, improving local air quality in the surrounding low-income community. At full-scale build out, the project will reduce greenhouse gases by 8,370 metric tons of carbon dioxide equivalent per year.

When fully operational, the SANCO Anaerobic Digestion Project (SADP) will divert 23,250 tons per year of food waste from landfills. The SADP builds upon modular anaerobic digestion technology that has been used at numerous locations throughout the world, most recently at a facility in San Luis Obispo, California. The SADP also produces beneficial products: biomethane and bio-fertilizer. Yearly production of biomethane will be 146,056,841 cubic feet, which will be injected into the San Diego Gas and Electric pipeline and used as renewable transportation fuel for waste collection trucks. The project will also produce 74,400 tons per year of solid bio-fertilizer and 6,600 tons per year of liquid bio-fertilizer.

Through the implementation of this project, SANCO is redoubling efforts to improve surrounding neighborhoods through the execution of a formal community benefits agreement with various community organizations. This agreement includes commitments to provide ongoing communication about the project to the nearby low-income community, free compost, and more. The project will create seven new full-time positions with benefits, including four permanent positions and three contract positions, and an additional 15 temporary construction jobs. SANCO will prioritize hiring residents of the local community and low-income residents and commits to employees' receiving industry-recognized credentials.

Steve South, President and Chief Executive Officer of SANCO, says: "We are excited about the proposed project and the positive benefits it will generate for the environ-ment and our local community."

## **Waste Diversion**

# Recycled Fiber, Plastic, and Glass Grants

#### CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

## **Cumulative Funding**

How much funding has the program received? \$36.1 million allocated.

# How much has gone to implemented projects? \$25.7 million implemented.

## **Program Description**

#### What types of projects are funded?

The construction, renovation, or expansion of facilities to process or manufacture value-added products or intermediate commodities from California-derived, newly-diverted fiber, plastic, or glass waste.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Local governments, nonprofit organizations, for profit entities, state and federal agencies, public universities and colleges, solid waste facilities and Regional Authorities, public school districts, and qualifying tribes.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged and low-income communities through diversion of waste from disadvantaged communities, textile rescue to disadvantaged communities, direct community engagement, job training, or job creation receive additional points during application scoring.

# **2020 OUTCOMES**

No projects were implemented in 2020, additional implemented projects are forthcoming.



## CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

# **Recycled Fiber, Plastic, and Glass Grants**

## Netafim Irrigation, Inc.

Netafim Irrigation, Inc. received a total of \$2,011,647 from California Climate Investment through the Recycled Fiber, Plastic, and Glass Grant Program. This money supports its operations as a closed-loop recycling solution for used irrigation tubing that serves commercial farming operations in the Central Coast region of California. Netafim's grant is expanding an established and successful recycling operation. As a result of this expansion in Netafim's operations, the project is estimated to divert 83,059 tons of material from landfills and reduce greenhouse gas emissions by 66,447 metric tons of carbon dioxide equivalent.

This competitive grant program aims to lower overall greenhouse gas emissions by expanding existing capacity or establishing new facilities in California that use California-generated recycled fiber (old corrugated cardboard, paperboard, or textiles), plastic, or glass to manufacture new products.

Netafim collects used irrigation tubing and transports it to their recycling facility in Fowler. At the recycling facility, the irrigation tubing is shredded, washed, and pelletized before being transported to Netafim's manufacturing facility in Fresno. At the manufacturing facility, the recycled pellets are blended with other resins and compressed into new irrigation tubing. Once this recycled-content irrigation tubing reaches end of life, it will be collected by Netafim and recycled once again.

Danielle McShance, Chief Financial Officer of Merrill Farms in Salinas Valley, is very appreciative of the Netafim products: "This technology enables us to significantly reduce the amount of water and fertilizer we use versus conventional overhead sprinkler technology. This method also significantly reduces our energy consumption. Recycling the used tubing at the end of product life, however, is also a priority for our company. Netafim's recycling program not only enables us to do that and avoid sending it to the landfill, but their utilization of the recycled tubing into new drip tubing allows our operation to participate in a complete closed-loop system."

Netafim has also been hiring, and plans to continue to hire, employees from disadvantaged and low-income communities and to educate the local community about the project and opportunities for growth. The grant term will run through April 1, 2022.

## **Waste Diversion**

## **Reuse Grant Program**

### CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

## **Cumulative Funding**

How much funding has the program received? \$2.0 million allocated.

How much has gone to implemented projects? \$0.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Replacement of single-use containers, food service ware, and packaging with durable, reusable products. Recovery of lumber, wood flooring, or wood furniture from landfills or through deconstruction projects for reuse.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Local governments, state agencies, nonprofit organizations, private, for-profit organizations, and qualifying Indian Tribes.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged and low income communities through diverting from a landfill in a disadvantaged community, job training, job creation, or provision of high-quality reused materials can receive additional points during application scoring.

# 2020 OUTCOMES

As of November 30, 2020, no projects have been reported as implemented. This program is expected to begin implementing projects in 2021.

# Low-Carbon Transit Operations Program

## CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

# Cumulative Funding<sup>48</sup>

How much funding has the program received? \$606.7 million appropriated.

How much has gone to implemented projects? \$558.3 million implemented.

## **Program Description**

## What types of projects are funded?

Operating and capital assistance for transit agencies to reduce GHG emissions and improve mobility, with a priority on serving disadvantaged communities.

## How to access funds?

Transit agencies are awarded funds based on a noncompetitive, formula-based list prepared by the State Controller's Office.

## Who receives funds?

The State Controller's Office provides a list of transportation planning agencies and transit operators that are eligible for State Transit Assistance Funds. There are nearly 200 eligible recipients throughout California.

# How does the program target funds and provide benefits to priority populations?

Transit agencies whose service areas include a disadvantaged community are required to expend at least 50 percent of their apportionment on projects that benefit a disadvantaged community.<sup>49</sup>

- 48 By statute, the LCTOP program is appropriated 5% of the proceeds of each quarterly auction. These appropriated funds are then allocated annually to transit agencies via an established formula. This results in a temporary gap between appropriated and selected/awarded/ implemented funds each year.
- 49 Benefits to priority populations shown here account for statutory investment minimums in SB 535 and AB 1550. In addition to these investment minimums, SB 862 requires that, for transit agencies whose service areas include disadvantaged communities, at least 50 percent

# **2020 OUTCOMES**

\$225.4 M IMPLEMENTED

## **EXPECTED BENEFITS**

2,431,940 MTCO, E GHG REDUCTIONS

3,164,902,289 VMT reductions

9,795,193 POUNDS NO<sub>x</sub> REDUCTIONS

77,905,574 POUNDS NO<sub>x</sub> REDUCTIONS







## Water-Energy Grant Program

### CALIFORNIA DEPARTMENT OF WATER RESOURCES (DWR)

## **Cumulative Funding**

How much funding has the program received? \$49.3 million appropriated.

How much has gone to implemented projects? \$36.7 million implemented.

## **Program Description**

### What types of projects are funded?

Commercial and institutional Water-Energy efficiency programs or projects, and residential Water-Energy efficiency programs or projects benefiting disadvantaged communities.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Local agencies, joint power authorities, and nonprofit organizations. For some projects, residents are then distributed water saving devices.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged communities received higher funding priority rankings.

# **2020 OUTCOMES**

\$0.5 M IMPLEMENTED

#### **EXPECTED BENEFITS**

6,769 MTCO, E GHG REDUCTIONS

228,665,464 GALLONS WATER SAVINGS

## FUNDING DISTRIBUTION

\$0.2 M

TO BENEFIT PRIORITY POPULATIONS



of their LCTOP funds must benefit those disadvantaged communities. Cumulatively, 89 percent of implemented LCTOP funds benefit disadvantaged communities.

# **Food Production Investment Program**

## **CALIFORNIA ENERGY COMMISSION (CEC)**

## **Cumulative Funding**

How much funding has the program received? \$124.0 million appropriated.

How much has gone to implemented projects? \$103.2 million implemented.

## **Program Description**

#### What types of projects are funded?

Grants to food processors to implement projects that reduce greenhouse gas emissions and onsite energy consumption.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

California food processors.

# How does the program target funds and provide benefits to priority populations?

Higher application scores are awarded to projects that are located within and provide a benefit to disadvantaged and low-income communities. Many food processing facilities are located within and around priority population communities. By funding cleaner technologies and more-efficient equipment, the majority of FPIP projects result in reduced criteria air pollutant emissions for these communities. Other projects also support jobs or provide educational and community capacity building opportunities.

# **2020 OUTCOMES**

\$77.6 M IMPLEMENTED

#### **EXPECTED BENEFITS**

1,914,453 MTCO<sub>2</sub>E GHG REDUCTIONS

5,475,000 GALLONS WATER SAVINGS

330,129,127 THERMS ENERGY SAVINGS

### FUNDING DISTRIBUTION



other areas of California

## CALIFORNIA ENERGY COMMISSION

# Food Production Investment Program

## Imperial Western Products Regional Energy Efficiency Project

Imperial Western Products, Inc. is demonstrating how clean energy technology can help food processing facilities advance California's climate and energy goals.

In 2019, the Coachella-based company was awarded a \$459,624 grant from California Climate Investments through the Food Production Investment Program to deploy energy efficiency upgrades at its facilities in the cities of Coachella, Mira Loma, and Selma. In 2020, the company received a second Food Production Investment Program



grant worth \$2,117,678 to design and operate a micro-grid system at its Coachella facility.

Each year, Imperial Western Products processes 500,000 tons of residual food and other organic waste into animal feed, reducing organic waste directed to landfills and avoiding associated greenhouse gas emissions. The company is well-integrated into the regional economy, sourcing its stock from local cotton-gins, food and pet food producers, and used cooking oil facilities. The installation of boilers, heat exchangers, and more, as well as reduced electricity and natural gas consumption, are saving money and reducing emissions.

The micro-grid will make Imperial Western Products' Coachella facility more resilient and capable of continuing operations during an outage by using solar panels and batteries to produce and store energy. An additional benefit is that during normal operations, it will reduce use of grid energy, shave peak loads, and enable participation in demand response.

The efficiency project and micro-grid are anticipated to annually save nearly 113,000 therms of natural gas and 1.5 million kilowatt-hours of electricity respectively, together avoiding 1,010 metric tons of carbon dioxide equivalent emissions.

All three Imperial Western Products manufacturing facilities are located in under-resourced communities. By requiring subcontractors to work with local agencies and post job opportunities locally, manufacturing jobs created by these projects will directly benefit low-income residents. Further, Imperial Western Products routinely works with local schools and colleges to fill jobs and, to demonstrate the benefits of clean energy technology, the company offers facility tours highlighting clean energy technology.

These Food Production Investment Program-funded projects have received strong support from local officials, including Assemblymember Eduardo Garcia and Coachella Mayor Steven Hernandez. "I applaud Imperial Western Products on the success of their California Energy Commission grant(s)... this family-owned company has grown as a tremendous asset to the city, placing us in the industry spotlight through their innovative advancements and by providing quality jobs for our families," Mayor Hernandez said. "They share our vision for a healthier and more environmentally-sustainable Coachella, and I am excited to see them work alongside Assemblymember Eduardo Garcia to bring additional state investments into our community."

# **Low-Carbon Fuels Production**

## **CALIFORNIA ENERGY COMMISSION (CEC)**

## **Cumulative Funding**

How much funding has the program received? \$12.5 million appropriated.

How much has gone to implemented projects? \$12.5 million implemented.

## **Program Description**

#### What types of projects are funded?

New and expanded renewable ultra-low-carbon transportation fuel production at commercial scale.

### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Public and private California fuel producers.

# How does the program target funds and provide benefits to priority populations?

Higher application scores are awarded to projects that are located within and provide a benefit to disadvantaged and low-income communities. Investments in renewable transportation fuel reduce criteria air pollutant and/or toxic air contaminant emissions, such as diesel particulate matter, to residents of impacted communities.

# **2020 OUTCOMES**

\$12.5 M IMPLEMENTED

#### **EXPECTED BENEFITS**

452,478 MTCO<sub>2</sub>E GHG REDUCTIONS

#### FUNDING DISTRIBUTION





Iow-income communities & households



other areas of California

# Renewable Energy for Agriculture Program

## CALIFORNIA ENERGY COMMISSION (CEC)

## **Cumulative Funding**

How much funding has the program received? \$10.0 million appropriated.

How much has gone to implemented projects? \$9.5 million implemented.

## **Program Description**

### What types of projects are funded?

Adoption of onsite renewable energy technologies (such as wind and solar) at agricultural operations.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Private entities, local governments, academic, educational, and nonprofit organizations, joint powers authorities, and tribal governments.

# How does the program target funds and provide benefits to priority populations?

Higher application scores for projects benefiting disadvantaged communities.

# **2020 OUTCOMES**

\$0.3 M IMPLEMENTED

### **EXPECTED BENEFITS**

2,063 MTCO, E GHG REDUCTIONS

179 POUNDS PM<sub>2.5</sub> REDUCTIONS

715 POUNDS NO<sub>x</sub> reductions





## **CALIFORNIA ENERGY COMMISSION**

# **Renewable Energy for Agriculture Program**

## **Oya Organic Farms**

Oya Organic Farms, an organic vegetable farm in Hollister, received a \$76,446 grant from California Climate Investments through the Renewable Energy for Agriculture Program (REAP) that, together with a 76 percent match from the farm, will finance the installation of solar panels to power an irrigation pump and storage/office building. Their new 27-kilowatt solar system allows the farm to use zero-emission electricity for their domestic well and reinvest energy savings towards the farm. Furthermore, a standalone 6.4-kilowatt solar system coupled with battery storage will power the off-grid produce storage room and office on the farm.

Oya Organic Farms was founded in 2012 and is owned and operated by Marsha Habib, whose agricultural and business practices are centered on environmental sustainability. The farm has grown from one acre to more than 25 acres in size and rotates between almost 50 annual crops, from strawberries to onions, while allowing weeds and insects to coexist in a healthy ecosystem. Ms. Habib

sells her produce to local farmers' markets, restaurants, and stores looking for fresh organic produce.

Oya Organic Farms is committed to applying the same sustainable management standards and minimizing its carbon footprint. The installation of this solar system allows the farm to reduce its greenhouse gas emissions, increase energy reliability, and lower demand for grid electricity and associated energy costs. Ms. Habib reports, "The obvious reason to choose renewable energy is because we are an organic farm and our principles are to grow food for our local community using local resources and local inputs and nutrient cycling. We want to reduce our use of petroleumbased products and things that are polluting."



# Transition to a Carbon-Neutral Economy

# CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY (CALEPA)

## **Cumulative Funding**

How much funding has the program received? \$2.6 million appropriated.

How much has gone to implemented projects? \$2.6 million implemented.

## **Program Description**

### What types of projects are funded?

University of California researchers performed studies on how to reduce greenhouse gas emissions from the transportation sector. Study One focused on reducing the demand for fossil transportation fuels. Study Two focused on managing the decline in the supply of fossil transportation fuels.

#### How to access funds?

CalEPA had a contract with two UC research groups.

#### Who receives funds?

The UC Davis Institute of Transportation Studies received funding for Study One. Researchers at UC Santa Barbara received funding for Study Two.

# How does the program target funds and provide benefits to priority populations?

Both studies had equity as one of the guiding principles. The studies recommend actions that would benefit disadvantaged communities. Electrification of heavy-duty vehicles reduces pollution in these communities where a lot of trucks travel. A quota on oil extraction would result in more of the gains from improved air quality experienced by disadvantaged communities.

# **2020 OUTCOMES**

\$2.6 M IMPLEMENTED





## CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

# **Transition to a Carbon Neutral Economy**

## **Reaching Carbon Neutrality**

Supported by nearly \$2.6 million from California Climate Investments, the California Environmental Protection Agency is working with University of California researchers to carry out two studies that will help California reach its goal of achieving carbon neutrality by 2045. In particular, these studies will examine ways to reduce emissions from the transportation sector, the largest source of greenhouse gas emissions in California. The studies will also quantify air pollution and economic impacts for multiple greenhouse gas emissions reduction scenarios.

"[These studies are] the first to comprehensively evaluate a path to a carbon-neutral transportation system for California by 2045 and find that such pathways are possible but will rely on extensive policy changes" says Austin Lannes Brown, Executive Director of the UC Davis Policy Institute. "The study also seeks to center important factors such as equity, health, and workforce impacts in the analysis because a transition to zero-carbon transportation also needs to advance these goals."

Each study is looking into different, but complementary questions:

The Driving California's Transportation Emissions to Zero study, led by the University of California Institute of Transportation Studies, is identifying strategies that can significantly reduce transportationrelated fossil fuel demand and emissions. These strategies include transitioning to zero-emission vehicles, accelerating the use of alternative fuel sources, and reducing vehicle miles traveled.

The Enhancing Equity While Eliminating Emissions in California's Supply of Transportation Fuels study, led by the University of California, Santa Barbara, is analyzing strategies to responsibly manage the decline of transportation-related fossil fuel supply – namely production quotas, setbacks, and export restrictions.

Residents of disadvantaged communities stand to benefit from future policies informed by these studies. "One key finding of this study has to do with differences in pollution exposure between disadvantaged and other communities," Professor David Lea of UC Santa Barbara explains. "It is well known that lowincome communities and communities of color are exposed to more pollution in California. But what is less known is what phasing out oil production will do to air quality. We document that there's an equity gain when oil production is phased out. As the state extracts less oil, more of the gains from improved air quality will be experienced by disadvantaged communities."

# Wildfire Response and Readiness

# **Fire Engines and Maintenance**

## CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES (CAL OES)

## **Cumulative Funding**

How much funding has the program received? \$26.0 million appropriated.

How much has gone to implemented projects? \$4.8 million implemented.

## **Program Description**

#### What types of projects are funded?

Fire engine procurement and training for local fire agencies to keep fires small; training on new hazards correlated with climate change impacts; enhancement of resources in preparation for emergency operations and disaster relief supporting California Mutual Aid System

#### How to access funds?

Requests from fire departments will be evaluated for which areas/regions can best serve California's Mutual Aid System.

#### Who receives funds?

Local fire agencies, Cal OES State Fire and Rescue, Regional Fire and Rescue, and Operational Area Fire and Rescue Coordinators.

# How does the program target funds and provide benefits to priority populations?

20 percent of funds will be spent on projects in low-income and/or disadvantaged communities to reduce local fire risk.

# **2020 OUTCOMES**

\$4.8 M IMPLEMENTED



# Wildfire Response and Readiness

# Wildfire Response and Readiness

# CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES (CAL OES)

## **Cumulative Funding**

How much funding has the program received? \$25.0 million appropriated.

How much has gone to implemented projects? \$25.0 million implemented.

## **Program Description**

### What types of projects are funded?

Local assistance grants to fire departments within High Hazard Severity Zones to preposition emergency services crews and equipment during red flag events in order to protect communities from wildfires.

#### How to access funds?

Operational areas submit mobilization and resource order sheets to Cal OES for approval.

#### Who receives funds?

Local fire agencies, Cal OES State Fire and Rescue, operational area fire and rescue coordinators.

# **2020 OUTCOMES**

\$21.6 M IMPLEMENTED



# **High-Speed Rail Project**

# CALIFORNIA HIGH-SPEED RAIL AUTHORITY (AUTHORITY)

## Cumulative Funding<sup>50</sup>

How much funding has the program received? \$3,563.8 million appropriated.

### How much has gone to implemented projects?

The Authority has implemented \$2,284.8 million through November 30, 2020, on the high-speed rail project, with the remaining \$1,279 million supporting ongoing construction and project development.

## **Program Description**

California high-speed rail is a critical tool for zero-carbon inter-regional travel. It will transform how people move around the state, capturing 30 percent of the short-haul air market. The high-speed rail system has been delivering jobs and spurring economic growth and will further help California achieve its social equity, economic development and environmental objectives by connecting the state's economic engines.

Powered by renewable energy, the Phase 1 system will link San Francisco to the Los Angeles basin in under three hours at speeds of over 200 miles per hour. In Phase 2, the system will extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations.

# **2020 OUTCOMES**

The Authority benefits disadvantaged populations in multiple ways, including through its Community Benefits Agreement (CBA).<sup>43</sup>

The Authority reports that as of November 30, 2020, 574 small businesses were working on the project—including 558 small businesses located in California. Of these, 185 are Disadvantaged Business Enterprises and 62 are Disabled Veteran Business Enterprises. Of all the small businesses in California, 155 are located in disadvantaged communities. The contract value for small businesses in disadvantaged communities is more than \$230 million

Cumulatively, the High-Speed Rail Project has provided a living wage for more than 5,100 workers that have worked more than 3.6 million work hours. More than 70 percent of work hours were performed by Targeted Workers and almost 20 percent of those work hours were performed by Disadvantaged Workers, vastly exceeding the targets set in the CBA.

Approximately 50% percent of those workers (2,480) live in disadvantaged communities. Overall, 55% of the investment of high-speed rail funding has been in disadvantaged communities.

<sup>50</sup> Per SB 862, the High-Speed Rail project is appropriated 25% of the proceeds of each quarterly auction. The Authority does not select or award funds, as all appropriated funds are used for the HSR project. SB 862 states that \$400 million shall be available to the Authority beginning in FY 2015-16 as repayment of a loan from the GGRF to the General Fund. This money shall be repaid as necessary, based on the financial needs of the High-Speed Rail Project. \$400 million of this loan amount is included in the reported \$3,563.8 million cumulative appropriations.

<sup>51</sup> The CBA encourages a 30% small business participation goal and ensures that 30% of all project work hours are performed by National Targeted Workers, with at least 10% of those work hours be performed by Disadvantaged Workers. The CBA definitions of Targeted Worker and Disadvantaged Worker are not aligned with the designations of priority populations for the purposes of meeting the investment minimums in SB 535 or AB 1550. For this reason, these employment benefits are

Accelerating the decarbonization of the transportation network with transformative transportation tools is crucial for achieving the environmental imperatives of reduced vehicle miles traveled and a massive mode shift away from gas-powered cars and planes to zero-emission high-speed trains. This future-ready system will shift air travelers and drivers to electrified high-speed rail system.

Importantly, the system is being built as an integral component of the 2018 California State Rail Plan. The State Rail Plan presents a vision for a modern, integrated statewide passenger rail system connecting all urban, suburban and rural communities with frequent, reliable service.

The Authority is working with regional partners to implement the State Rail Plan, which will invest billions of dollars in local and regional rail lines to meet California's transportation needs. The Authority remains committed to advancing the high-speed rail program in Northern and Southern California with multiple, concurrent investments in high-demand travel corridors, such as the electrification of the Caltrain corridor and the Link Union Station Project.

Because it complements connecting transit and rail services, the high-speed rail system will provide significant benefit to the state. Ridership and revenue for all services are enhanced if connecting services are integrated with high-speed rail services through timed connections and an integrated ticketing system, as discussed in the 2018 State Rail Plan.

Every two years, the Authority releases a business plan to inform the Legislature, the public, and stakeholders of the project's implementation, including proposed timelines for construction, ridership forecasts, and capital cost estimates. The 2020 Business Plan, published in February 2021,<sup>52</sup> discusses the recommendation of the Merced to Bakersfield line in more detail.

The 2020 Business Plan also discusses the results of several studies that confirm that early interim highspeed rail service in the Central Valley will generate faster service and greater connectivity, which provide the highest ridership potential and fare revenue of any other investment option, provides the most congestion relief and generates higher reductions of greenhouse gas emissions.

Currently, the Authority recycles construction waste and requires contractors to use clean construction equipment to reduce GHGs and air pollutant emissions from high-speed rail construction in the Central Valley. The Authority offsets emissions through an agreement with San Joaquin Valley Air Pollution Control District to replace diesel engines in the Central Valley, and an agreement with CAL FIRE to fund urban and rural tree planting programs in disadvantaged communities. More than 6,000 trees have been planted. The Authority has also identified permanent agricultural easements of more than 1,250 acres and preserved and restored more than 3,645 acres of habitat.

not credited as benefiting priority populations, but provide a direct and assured benefit to those targeted employees. Targeted Workers include individuals that reside in low-income ZIP codes. A Disadvantaged Worker is a Targeted Worker with additional barriers to employment.

<sup>52</sup> In February 2021, The High-Speed Rail Authority released the Revised Draft 2020 Business Plan with revised estimates on costs and emission reductions—a cost range of \$63.2 billion to \$98.1 billion (year of expenditure) for the Phase 1 System; a reduction of GHG emissions by 102 million metric tons of CO<sub>2</sub>e over the first 50 years of operation; and a reduction of air pollutants (NO<sub>x</sub>, ROG, CO, PM, and toxics) by more than 100,000 tons over the same timeframe. The Authority will finalize this Business Plan in 2021.
## CALIFORNIA HIGH-SPEED RAIL AUTHORITY

# **California High-Speed Rail Project**

## **Building Resilience**

The High-Speed Rail Authority (Authority) is responsible for planning, designing, building and operating the first High-Speed rail in the nation. When complete, it will run from San Francisco to the Los Angeles basin in under three hours, providing a clean alternative to driving or flying. Funded in part by California Climate Investments, the project is already contributing to economic development and a cleaner environment, creating jobs, and preserving agricultural and protected lands.



Reducing, avoiding, and offsetting greenhouse gas

emissions is a priority for High-Speed rail construction. In fact, in December 2020 the project earned a national award for its sustainability efforts. The program received the Envision Platinum rating from the Institute for Sustainable Infrastructure for its sustainability efforts. It is highest-level award from the institute and the first time a program of this size and complexity has earned such an honor.

"This robust, third-party review of sustainability performance against 64 different issue areas illustrates how the California High-Speed Rail Authority is delivering on its commitment to provide current and future generations a system that protects and restores social, environmental, and economic sustainability in its delivery and on into operation," Institute for Sustainable Infrastructure Managing Director Melissa Peneycad said.

To help offset the emissions from the rail's construction, more than 6,000 trees have been planted and more than 2,200 acres of rural conservation projects have been completed since January 2016. As a result, approximately 180,000 metric tons of carbon dioxide equivalent will be sequestered by these trees over their lifetime. More than 46,000 additional metric tons of carbon dioxide equivalent have been sequestered or avoided through habitat and agricultural land conservation, and more than 57,800 metric tons have been avoided through construction recycling.

At a time of economic distress for many due to COVID-19, essential construction work continues, providing jobs for Californians. As of December 2020, the Authority has commissioned work from 574 small businesses, including 185 Certified Disadvantaged Business Enterprises, ensuring small businesses play a significant role in the program. Over 150 of small businesses working on the high-speed rail system are located in disadvantaged communities. Also in October, pre-apprenticeship classes and hands-on construction industry training for Central Valley residents kicked off in the city of Selma, serving Valley veterans, at-risk young adults, and minority and low-income populations. In the Central Valley, the Authority announced more than 5,000 construction jobs had been created to date across 119 miles of High-Speed rail construction. Approximately half of those workers live in disadvantaged communities.

# **Regional Forest and Fire Capacity**

#### CALIFORNIA NATURAL RESOURCES AGENCY (CNRA)

## **Cumulative Funding**

How much funding has the program received? \$20.0 million appropriated.

How much has gone to implemented projects? \$4.6 million implemented.

### **Program Description**

#### What types of projects are funded?

Regional Priority Plan development for forestry, fire protection, and watershed improvements; project development and permitting; forest management demonstration projects; outreach, education, and training.

#### How to access funds?

Noncompetitive block grants are awarded by region.

#### Who receives funds?

Local and tribal governments, state conservancies, joint powers authorities, public agencies, resource conservation districts, special districts, and 501(c)(3) nonprofit organizations.

# How does the program target funds and provide benefits to priority populations?

This program funds capacity building efforts for local and regional scale planning and access to resources for fire response, fire resilency, and forestry management actions. It facilitates education, training, and networking that empower low income and disadvantaged communities to develop local projects, create plans, and implement demonstration projects.

# **2020 OUTCOMES**

\$4.6 M IMPLEMENTED





#### CALIFORNIA NATURAL RESOURCES AGENCY

# **Regional Forest and Fire Capacity**

## The North Coast Resource Partnership

The North Coast Resource Partnership (NCRP) is a unique coalition of North Coast Tribes and seven counties that represent the North Coast and Klamath/Interior Coast Ranges ecological regions, both of which are important carbon storage areas in California. To help protect the health of forests in this territory, the NCRP is using \$4,037,500 of California Climate Investments funding through the Regional Forest and Fire Capacity Program to develop a regional priority plan that will generate implementation-ready projects and provide funding for demonstration projects.

The Regional Forest and Fire Capacity program is helping communities throughout the state create plans that prioritize, develop, and implement projects to increase regional fire resiliency and improve forest health. The NCRP is creating a plan for the North Coast that, according to staff member Cybelle Immit, "Will include a comprehensive and integrated set of strategies, actions, and projects to support forest, watershed and community health, and long-term resilience to wildfire."

In addition to these regional planning efforts, NCRP is building capacity for forest treatments through demonstration projects. So far, they have awarded funds to 13 demonstration projects with the hopes that they will help increase the scope and scale of multi-benefit forest management in the North Coast region.

In one demonstration project, the Karuk Tribe is broadening and strengthening a network of tribal fire practitioners who will utilize prescribed fire as a tool for achieving long-term forest and ecosystem health. The project will serve as a model for a training.

The Scott River Watershed Council is also carrying out a fuel reduction treatment on 80 acres near the city of Etna that will create bio-char for distribution to local agricultural producers. The project demonstrates the benefits of using large-scale and efficient carbonator technology.

# **Urban Greening Program**

#### CALIFORNIA NATURAL RESOURCES AGENCY (CNRA)

#### **Cumulative Funding**

How much funding has the program received? \$156.0 million appropriated.

How much has gone to implemented projects? \$117.4 million implemented.

#### **Program Description**

#### What types of projects are funded?

Establishment, enhancement, and expansion of community spaces and parks, tree planting, green infrastructure in streets and alleys, and the construction of active transportation infrastructure.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Local governments, special districts, nonprofit organizations, and joint powers authorities.

# How does the program target funds and provide benefits to priority populations?

The program weights competitive proposal scoring to favor projects with investment in priority populations. Direct benefits to these communities include increased tree coverage, improved stormwater management, reduced building energy consumption, and active transportation options to provide safe alternatives for car free travel in areas otherwise lacking such infrastructure.

# **2020 OUTCOMES**

\$19.4 M IMPLEMENTED

#### **EXPECTED BENEFITS**

8,902 MTCO<sub>2</sub>E GHG REDUCTIONS

> **540,168** KWH ENERGY SAVED

> > 1,230 TREE PLANTINGS





## CALIFORNIA NATURAL RESOURCES AGENCY

# **Urban Greening Program**

## Wishing Tree Park

One of the Los Angeles Neighborhood Land Trust's most exciting parks currently under construction is the 8.5-acre, multi-benefit Wishing Tree Park located in unincorporated West Carson, Los Angeles County. This project has been in the works for decades, and thanks in part to a \$2,500,000 grant from California Climate Investments through the Urban Greening Program the park will be opening to the public in late 2021.

The project was designed in partnership with community residents who are deeply impacted by environmental injustices, and it will provide crucial new recreational open space for a disadvantaged community that currently has zero acres of park space. The grant is providing critical funding to support the development of the park including planting carbon-sequestering native trees, droughtresistant landscaping, and a high-efficiency irrigation system. The new park will further reduce greenhouse gas emissions by decreasing vehicle miles traveled as community residents will no longer need to drive up to two miles to access the nearest park.

The name of the Wishing Tree Park was inspired by two young sisters who lived nearby. In anticipation of a future park, ficus trees were planted over a decade ago and lined the alleyway in wooden boxes as a sign of what could be. These trees outgrew their boxes and planted their roots deep into the soil, growing twenty times their intended size. One tree stood out to the two sisters, who started placing wishes on pieces of paper in their "Wishing Tree" with hopes that they would come true. One of their wishes was having a beautiful park in their neighborhood where they could play, and now it is a reality!

The Wishing Tree Park is situated on a now-remediated brownfield that residents had advocated for two decades be transformed into much-needed open space. Progress towards the park's development accelerated when the Neighborhood Land Trust acquired the property in November 2015. Additionally, community partners have been instrumental in the creation of the park. For example, Del Amo Action Committee has been advocating for a safe and beautiful community park for the past two decades and has also worked to make the project a reality. Additionally, the support of the Los Angeles County Department of Parks and Recreation as well as Los Angeles County Supervisorial District #2 was important to the success of the project.

# **Climate Ready Program**

#### CALIFORNIA STATE COASTAL CONSERVANCY (SCC)

## **Cumulative Funding**

How much funding has the program received? \$7.0 million appropriated.

How much has gone to implemented projects? \$6.7 million implemented.

### **Program Description**

#### What types of projects are funded?

Projects include multi-benefit climate adaptation projects such as urban greening, natural infrastructure, wetland enhancement, and sea level rise adaptation projects. Projects include planning to reduce future risks from climate change and promoting nature-based climate adaptation strategies. Projects use natural systems to sequester GHGs and promote on-the-ground demonstration projects that implement innovative approaches to climate adaptation.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Nonprofit organizations, tribes, and public agencies.

# How does the program target funds and provide benefits to priority populations?

The Coastal Conservancy has robust Justice, Equity, Diversity, and Inclusion guidelines. The Climate Ready Program solicitation guidelines prioritize projects that benefit disadvantaged communities through a selection scoring criteria. At least 35 percent of the total funds will support projects that are located in and provide benefits to disadvantaged or low-income communities and must be designed to avoid substantial burdens on those communities.

# **2020 OUTCOMES**

\$2.9 M IMPLEMENTED

#### **EXPECTED BENEFITS**

**3** ACRE RESTORATION

32 ACRE CONSERVATION

**3** CLIMATE ADAPTATION PLANS





## CALIFORNIA STATE COASTAL CONSERVANCY

# **Climate Ready Program**

## South Carlsbad Boulevard Climate Adaptation Project

A major transportation corridor in the city of Carlsbad, South Carlsbad Boulevard is highly vulnerable to flooding and erosion as a result of climate change. But thanks to a \$498,075 grant from California Climate Investments through the Climate Ready Grant Program, the city was awarded in 2019, Carlsbad is creating a plan to protect a portion of the boulevard that is particularly vulnerable to sealevel rise, frequent coastal flooding, and cliff erosion.

South Carlsbad Boulevard runs parallel to local state park beaches and is a major transportation corridor, providing access for locals and commuters alike. However, the corridor is categorized as high-risk in the Carlsbad Sea Level Rise Vulnerability Assessment. By creating a plan to enhance the habitat around this vulnerable stretch of coastal infrastructure, future restoration efforts will facilitate greenhouse gas emissions reductions and support multimodal transit options.

To carry out this planning project, the city of Carlsbad is partnering with a broad coalition of scientists, local resource managers, decision-makers, and regulators. For example, Scripps Institution of Oceanography is working with the project team to analyze how wave-driven storms, runoff, and cliff slope and composition affect the stability and erosion of the Carlsbad cliffs within the project scope. The project team is also prioritizing outreach and is holding listening sessions with various stakeholders to understand their opinions on complex issues like parking and coastal access. Community feedback and engagement are being collected and considered, especially in regards to the design of access points and gathering spaces.

Mike Grim, a senior programs manager with the city of Carlsbad, is excited to see the plan implemented and appreciates the collaborative nature of this planning effort: "The city of Carlsbad is grateful to the California Air Resources Board and California Coastal Conservancy for their funding of this vital climate adaptation project. Carlsbad Boulevard is critical infrastructure, both as a north-south transportation corridor and as access to the undeveloped coastline for recreational and aesthetic enjoyment. By partnering with Scripps Institution of Oceanography, as well as important stakeholders, the roadway alignment, community vision spaces, and habitat restoration components will be based upon the best available science and align with local and statewide policies. This collaborative and comprehensive effort allows the city to be well-positioned for a successful and resilient capital improvement project."

# Transit and Intercity Rail Capital Program

# CALIFORNIA STATE TRANSPORTATION AGENCY (CALSTA)

# Cumulative Funding<sup>53</sup>

How much funding has the program received? \$1,324.8 million appropriated.

How much has gone to implemented projects? \$389.9 million implemented.

# **Program Description**

## What types of projects are funded?

Transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems, bus and ferry transit systems, to significantly reduce GHG emissions, vehicle miles traveled, and congestion.

### How to access funds?

Apply through a statewide competitive process

### Who receives funds?

Public agencies that operate or have planning responsibility for existing or planned intercity or commuter passenger rail service, urban rail transit, or bus or ferry service.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting priority populations are encouraged and taken into consideration during the evaluation process. The program has a statutory requirement of providing at least 25 percent of available funds to projects that provide direct, meaningful and assured benefits to disadvantaged communities.

# **2020 OUTCOMES**

\$27.9 M IMPLEMENTED

### **EXPECTED BENEFITS**

138,521 MTCO<sub>2</sub>E GHG REDUCTIONS

4,712 pounds PM<sub>2.5</sub> reductions

14,496 pounds NO<sub>x</sub> reductions



<sup>53</sup> By statute, the TIRCP program is appropriated 10% of the proceeds of each quarterly auction. SB 9 (Chapter 710, Statues of 2015) directed TIRCP to fund transformative capital improvements and authorized CaISTA to make multiyear funding commitments in furtherance of that purpose. In doing so, the amount of funding for selected projects may exceed the cumulative appropriations, in anticipation of future funding availability.



### CALIFORNIA STATE TRANSPORTATION AGENCY

# **Transit and Intercity Rail Capital Program**

## Caltrain

Caltrain, the seventh-largest commuter rail agency in the nation, is undergoing a major transformation by electrifying the railroad to provide cleaner, quieter, and more efficient service. In 2018, Caltrain received a grant from California Climate Investments through the Transit and Intercity Capital Rail Program (TIRCP), allowing the agency to expand the new electric train fleet from 16 six-car trainsets to 19 seven-car trainsets. This greatly expands both the capacity and the potential frequency of the soon-to-be-electrified rail service. Considering that Caltrain's analysis of travel patterns, demographic growth and economic expansion in the region expects ridership demand to increase by 300 percent over the next 20 years, this funding could not have come at a better time.

In addition to the funds for additional train cars, this grant is helping fund passenger WiFi service onboard the system's new electric fleet, an amenity that was a major concern for many riders. Additionally, some of those funds were put towards enhanced bicycle facilities at Caltrain stations, including e-lockers and bike rental services. This will help Caltrain maintain its status as having the highest number of bike-riding passengers in the country.

This funding has allowed Caltrain to fully embrace the benefits of the electrification of its system, and its tens of thousands of riders will benefit from a cleaner mode of transit. This purchase helps to achieve numerous objectives for the agency, including reducing diesel emissions, greenhouse gas emissions, and noise.

To take a virtual tour of these trains, visit www.calmod.org.

# Safe and Affordable Drinking Water Fund

# CALIFORNIA STATE WATER RESOURCES CONTROL BOARD (STATE WATER BOARD)

# **Cumulative Funding**

How much funding has the program received? \$149.3 million appropriated.

How much has gone to implemented projects? \$50.7 million implemented.

# **Program Description**

### What types of projects are funded?

Project types include consolidation with larger water systems, operations and maintenance costs, building local technical and managerial capacity, planning efforts for long-term solutions, providing interim replacement water, and administrators to run the small systems.

### How to access funds?

Submit a pre-application for the continuous solicitation yearround, at waterboards.ca.gov/safer/.

### Who receives funds?

Public agencies, nonprofit organizations, public utilities, mutual water companies, tribal governments, State Water Board-appointed public water system administrators, and groundwater sustainability agencies.

# How does the program target funds and provide benefits to priority populations?

Funding is prioritized for FY 2020–21 based on the four priorities in the Fund Expenditure Plan: emergency or urgent funding needs; consolidations for systems out of compliance, at-risk systems, as well as state small water systems (state smalls) and domestic wells, focusing on small disadvantaged communities; providing interim solutions, initiating planning efforts for long-term solutions, and funding capital projects for state smalls and domestic wells with source water above a primary maximum contaminant level.

# **2020 OUTCOMES**

\$50.7 M IMPLEMENTED

#### **EXPECTED BENEFITS**

42,350 GALLONS OF BOTTLED DRINKING WATER

> **3** PLANNING PROJECTS

5 CONSOLIDATION PROJECTS

9 CONSTRUCTION PROJECTS

#### FUNDING DISTRIBUTION



TO BENEFIT PRIORITY POPULATIONS





## CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

# Safe and Affordable Drinking Water Fund

## Westside Elementary School Project

Westside Elementary School in the Coachella Valley relied solely on well water for its drinking water. The well had an unfortunate history of both contamination and the inability to provide adequate water supplies to prevent fires. Thanks in part to a nearly \$370,000 from California Climate Investments through the Safe and Affordable Drinking Water Fund, these problems have been solved.

Using the Safe and Affordable Drinking Water Fund grant and almost \$446,000 in principal forgiveness from the Drinking Water State Revolving Fund, the Coachella Valley Water District (CVWD) was able to consolidate Westside Elementary School into CVWD's water system.

"In the past, our school has been highlighted in the news due to hazardous metal found in our water," Westside Elementary School Principal Dr. Timothy Steele said. During a virtual groundbreaking ceremony on October 6, 2020, CVWD Vice President of the Board of Directors Cástulo Estrada stated: "With this connection, the school's going to be able to provide water for over 500 students and faculty."

This project contributes to a reduction of greenhouse gas emissions by reducing groundwater pumping at the school and invests in infrastructure to address equity and environmental justice. The project consists of laying approximately 1,350 feet of pipeline for the connection, installing meter back-flow devices and fire hydrant assembly, and conducting pavement and sidewalk removal and repair.

CVWD is working hard to provide safe water for its underrepresented communities. According to a 2018 report by the water district, there are roughly 40 independent water systems that would benefit from connecting to CVWD's water supply. CVWD is submitting grant applications for a variety of projects to connect some of these additional systems through the Safe and Affordable Funding for Equity and Resilience (SAFER) program, which is a set of tools, funding sources, and regulatory authorities designed to help struggling water systems provide safe drinking water sustainably and affordably with the primary goal of providing safe drinking water in every California community, for every Californian.

# Climate Adaptation and Resiliency Program

## CALIFORNIA WILDLIFE CONSERVATION BOARD (WCB)

## **Cumulative Funding**

How much funding has the program received? \$20.0 million appropriated.

How much has gone to implemented projects? \$11.5 million implemented.

## **Program Description**

### What types of projects are funded?

Conservation of natural and working lands to benefit climate adaptation and resilience for wildlife. Development and implementation of climate adaptation and resiliency projects that prioritize conservation and management of natural and working lands, provide technical assistance for natural and working land managers, and support efforts that improve ruralurban coordination on climate change adaptation.

### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Local governments, park and open space districts, resource conservation districts, private landowners, and nonprofit organizations.

# How does the program target funds and provide benefits to priority populations?

CARP considers the ability of projects to provide direct, assured, and meaningful benefits to priority populations as a competitive scoring criterion. Guidelines recommend direct consultation with local communities to determine needs and work collaboratively to address them while avoiding displacement or undue burden resulting from project activity.

# **2020 OUTCOMES**

\$7.0 M IMPLEMENTED

#### **EXPECTED BENEFITS**

1,703 MTCO<sub>2</sub>E GHG REDUCTIONS



# Low-Carbon Economy Workforce

# CALIFORNIA WORKFORCE DEVELOPMENT BOARD (CWDB)

## **Cumulative Funding**

How much funding has the program received? \$30.3 million appropriated.

How much has gone to implemented projects? \$0.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Sector-based regional partnerships, research and development of workforce programs, transition planning, regional economic and workforce planning, technical assistance to support projects.

#### How to access funds?

Invitation only application process to select eligible entities and competitive application process open to projects statewide.

#### Who receives funds?

Industry-based training providers, labor organizations and labor-management partnerships, community-based organizations, public education entities and training providers, workforce intermediaries, local workforce development boards.

# How does the program target funds and provide benefits to priority populations?

The program prioritizes projects that provide quality jobs and upward mobility for residents of disadvantaged communities. Projects will provide comprehensive, high-quality workforce development to priority populations, including job training, supportive services, and placement assistance.

# **2020 OUTCOMES**

As of November 30, 2020, no projects have been reported as implemented. This program is expected to begin implementing projects in 2021.

# **Coastal Resilience Planning**

## CALIFORNIA COASTAL COMMISSION (CCC)

## **Cumulative Funding**

How much funding has the program received? \$4.5 million appropriated.

How much has gone to implemented projects? \$2.1 million implemented.

## **Program Description**

#### What types of projects are funded?

Projects facilitate GHG emission reductions through land use and planning to address the impacts of climate change through the development of new or amendment of existing Local Coastal Programs, which are local land use plans and implementing ordinances for the coastal zone of California.

#### How to access funds?

Proposals can be submitted to the Coastal Commission for recommendation when grants are available. Proposals awarded by the Commission are selected based on the Commission's adopted priorities and evaluation criteria, amount of funding available and the requirements of the California Climate Investments program.

#### Who receives funds?

Local governments in the coastal zone.

# How does the program target funds and provide benefits to priority populations?

The Coastal Commission has a robust Environmental Justice policy and social equity component., Local governments who receive funding are required to reach priority populations through the direct engagement of communities in the local coastal planning process and to ensure the eventual implementation of land use policies provide benefits to priority populations, such as through land use policies that build better public transportation and improve public access to and along the coast.

# **2020 OUTCOMES**

\$1.3 M IMPLEMENTED

#### **EXPECTED BENEFITS**

#### 11 LOCAL COASTAL PLANS





## CALIFORNIA COASTAL COMMISSION

# **Coastal Resilience Planning**

## City of Santa Cruz, Local Coastal Program

In light of critical dangers to the city of Santa Cruz's roughly 4.6 miles of coastline posed by climate change, the city is using a \$200,000 grant from California Climate Investments through the Coastal Resilience LCP Planning Grant Program to develop strategies and policies intended to protect public beach access, prevent community displacement, and build resiliency against future coastal hazards.

The city's coastline provides a variety of cultural and recreational activities for residents and visitors. Yet, climate change has created a number risks to the coastal zone, including the risks of physical damage to infrastructure, loss of recreational spaces and natural habitat, and the risk of bluff-top erosion. The \$200,000 grant has enabled the city to engage community members in the development of adaptation strategies and land use policies that will be incorporated into – and strengthen – the city's Local Coastal Program.

To inform the city's Local Coastal Program update, city staff implemented an inclusive and comprehensive outreach plan to include members of the community in the planning process so they could understand how anticipated climate change hazards could disproportionately impact populations who are particularly vulnerable to climate change. As part of this outreach, the city deployed a Sea Level Rise Virtual Reality Application across its public libraries to depict how sea level rise will impact the city's beaches and coastal communities. This innovative tool is a unique way to explain a topic that many find difficult to understand.

Additionally, the city is developing an Adaptation Policy Guidance document that will recommend potential adaptation strategies in response to specific triggers.

"The city's trigger-based adaptation pathways approach has resonated with our community indicating they consider this a 'smart approach' to planning coastal management in the face of climate change," Tiffany Wise-West, a manager in the city's Climate Action Program, said.

Information gleaned from significant outreach planned for in the early phases of the project will help ensure adaptation strategies balance different people's needs.

# Training and Workforce Development Program

## CALIFORNIA CONSERVATION CORPS (CCC)

## **Cumulative Funding**

How much funding has the program received? \$55.9 million allocated.

How much has gone to implemented projects? \$20.4 million implemented.

## **Program Description**

#### What types of projects are funded?

Fire prevention and forest health management, energy conservation, riparian restoration, urban greening, and workforce training projects.

#### How to access funds?

The CCC have multiple Centers out of which crews operate, and each Center receives funding based on the number of full-time equivalent Corps-members positioned there. Centers access GGRF funding for specific projects on a first-come, firstserved basis.

#### Who receives funds?

California Conservation Corps.

# How does the program target funds and provide benefits to priority populations?

Most Corps-members are from disadvantaged or low-income communities or low-income households. The CCC actively recruits from priority populations. Corps-members benefit from paid work experience, job training, and certifications that prepare them for careers in natural resource conservation and energy.

# **2020 OUTCOMES**

\$7.1 M IMPLEMENTED

#### **EXPECTED BENEFITS**

17,780 MTCO, E GHG REDUCTIONS

> 51,017,920 KWH ENERGY SAVED

**358** ACRE RESTORATION

23 TREE PLANTINGS

#### FUNDING DISTRIBUTION

## \$6.8 M

TO BENEFIT PRIORITY POPULATIONS





CALIFORNIA CONSERVATION CORPS

# **Training and Workforce Development Program**

# **GGRF McKay Community Forest Fuel Reduction Project**

The California Conservation Corps (CCC), a state department within the California Natural Resources Agency, uses funds from California Climate Investments to complete projects aimed at reducing greenhouse gas emissions across California. These funds target forest health projects, especially fuel load reduction where dead and dying trees, brush, and vegetation are removed to reduce wildfire intensity and rate of spread. The McKay Community Forest Fuel Reduction project provided skilled labor to Humboldt County to minimize fire danger near communities on the southeastern edge of the City of Eureka.

The McKay Community Forest is 1,194 acres and borders the communities of Eureka, Cutten, and Ridgewood Heights. In May 2020, the CCC Fortuna Center provided over \$129,000 worth of labor and equipment to Humboldt County Public Works to treat 16 acres of the forest that pose high fire risk near these communities.

"The work was kind of tough at times," said Corps-member David Markson, who worked on the project. "We were mostly clearing out brush, cutting down some trees, but cutting through the overgrown grasses was the toughest part."

Markson, a San Diego native, joined the CCC to become part of the conservation movement and explore his future career options. CCC's project work must incorporate on-the-job training. For Markson, that training included learning how shaded fuel breaks and removing vegetation help protect communities, increase the forest's survivability from catastrophic wildfire, and reduce the greenhouse gases wildfires can emit. He also continued his hands-on training of utilizing a wood-chipper as the crew reduced the fuel load across the 16 acres.

"It was pretty rewarding because, while it was tough, at the end of it all we made quite a lot of progress," Markson said. "Knowing that people live nearby and there could be a threat of wildfire is something I thought about while we were working on the project. Completing the job left me with something I can feel good about."

Corps-members contributed 3,857 working hours on the fuel reduction project. The work and creation of a shaded fuel break satisfies the CAL FIRE Humboldt-Del Norte Operational Unit's fire plan for fuel reduction projects in the area, which is deemed to hold high fire danger.

# Wetlands & Watershed Restoration Program

## DEPARTMENT OF FISH AND WILDLIFE (DFW)

## **Cumulative Funding**

How much funding has the program received? \$46.7 million appropriated.

How much has gone to implemented projects? \$36.9 million implemented.

## **Program Description**

#### What types of projects are funded?

The restoration or enhancement of coastal wetlands, Sacramento–San Joaquin Delta wetlands, mountain meadows, and seasonal inland wetlands including vernal pools. These projects preserve and increase soil organic carbon and provide important co-benefits like enhanced fish and wildlife habitat, water quality protection and improvement, flood protection, groundwater recharge, as well as provide resiliency to ocean level rise.

#### How to access funds?

Apply through a statewide competitive application process.

#### Who receives funds?

Public agencies, nonprofit organizations, and recognized tribes.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged communities receive higher application scores. Benefits can include reducing flood risk and maintaining water quality for priority populations, as well as preserving sites that provide public access.

# **2020 OUTCOMES**

\$11.4 M IMPLEMENTED

#### **EXPECTED BENEFITS**

203,544 MTCO<sub>2</sub>E GHG REDUCTIONS

## 1,824 ACRE RESTORATION

#### FUNDING DISTRIBUTION

\$4.5 M

TO BENEFIT PRIORITY POPULATIONS



## CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

# Wetlands & Watershed Restoration Program

## Ecosystem and Community Resiliency in the Sierra Nevada: Restoration of the Clover Valley Ranch

With help from a \$680,974 grant from California Climate Investments through the Wetlands & Watershed Restoration Program, the Sierra Fund and project partners are carrying out multi-benefit restoration efforts at the 2,655-acre Clover Valley Ranch. Initiated in 2017, this project will sequester nearly 188,000 metric tons of carbon dioxide equivalent while halting stream incision; increasing



biodiversity; and improving hydrologic function, flood reduction, sediment filtration and water quality. However, the goal of this project extends beyond of ecosystem function and carbon sequestration benefits; these activities will also support community and cultural resilience through the promotion of cultural skills and activities.

The Clover Valley Ranch, a mountain meadow located high in the Sierra Nevada, sits at the headwaters of the Feather River watershed in Plumas County. Prior to the 19<sup>th</sup> century Gold Rush, this area was inhabited by the Mountain Maidu Tribe, who used thousands of years of traditional ecological knowledge to manage the ecosystem in a self-sustaining feedback loop. Sadly, more-recently-settled Californians' overgrazing and poor land management practices resulted in severe degradation of the watershed.

As part of this project, willow species used for basketry by the Maidu are being planted, seed is being sourced to grow plants identified as playing a role in subsistence and health, and beaver dam analogs are being built to incentivize the return and assistance of this keystone cultural species. The work is being implemented alongside First Nation youths and elders along with a host of partners, fostering reciprocal exchange of information and socio-ecological wellbeing. The project is also part of the ongoing collaborative initiative to develop best practices for Sierra Nevada meadow restoration between California's First Nation people, western scientific experts, and state and federal agencies in order to build the capacity for land stewardship at the local level and climate resilience for California at large.

"This project has been an important opportunity to share knowledge and skills that can be applied to restore ecological and cultural resilience at other sites like Tásmam Koyóm, a meadow that was returned to Maidu Summit Consortium in a landmark land transfer that took place in 2019," said Alisha Wilson, Interim Coordinator of the Maidu Summit Consortium.

Integration of local knowledge in the development and delivery of this project illustrate how datadriven restoration can foster local adaptation and simultaneously support the development of innovative tools and approaches that benefit the entire state in achieving climate resilience objectives.

# **Climate Smart Agriculture**

# Alternative Manure Management Program

## DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)

## **Cumulative Funding**

How much funding has the program received? \$69.1 million awarded.

How much has gone to implemented projects? \$60.9 million implemented.

## **Program Description**

#### What types of projects are funded?

Financial incentives to implement non digester practices to reduce or avoid methane emissions, including solid separation, conversion from flush to scrape manure collection, alternative manure treatment and storage such as compost bedded pack barns, and enhanced pasture based management practices.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Commercial dairy and livestock operators.

# How does the program target funds and provide benefits to priority populations?

Higher application scores for projects benefiting disadvantaged and low-income communities. Projects benefit communities through job creation, job training, and reduction of odor causing pollutants.

# **2020 OUTCOMES**

\$31.2 M IMPLEMENTED

#### **EXPECTED BENEFITS**

**366,432** MTCO<sub>2</sub>E GHG REDUCTIONS





CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)

# **Alternative Manure Management Program**

## Dairy Achieves Multiple Benefits through CDFA's Alternative Manure Management Program

Dairy farmer Lucas Wilgenburg improved the manure management on his Hanford, California facility, Wilgenburg West LLC, using a \$342,207 grant from California Climate Investments awarded by the Alternative Manure Management Program (AMMP).

Wilgenburg West is now using vacuum suctioning to pick up slurry manure from cow lanes and place wet manure onto windrows of drier manure in a graded compost cement pad. The grade of the compost pad enables water runoff from the facility and compost yard to be captured without interruption of the compost program and allows for annual composting. Approximately 600 tons of compost are produced each year at Wilgenburg West. The project included construction of a compost cement pad and the purchase of a vacuum tanker to suction slurry from cow stand lanes onto compost.

In addition to receiving this grant, the dairy invested over \$500,000 in matching funds and in-kind contributions to complete the project, aided greatly by funds obtained from High-Speed Rail Right-of-Way purchase of land west of the project site.

"I am proud that this project improved the management of 70 percent of manure and is keeping that manure out of an anaerobic environment," Wilgenburg said. "Our facility is now an excellent example of what a comprehensive manure management plan can achieve with very low greenhouse gas emissions." The project's greenhouse gas emission reductions equate to 4,325 metric tons of carbon dioxide equivalent over five years.

This project allows Wilgenburg West to evolve with the industry and foster environmental stewardship to remain viable and sustainable. The Wilgenburg family has been proactive in exploring and experimenting with practices that will protect the environment as well as create co-benefits, such as compost production, cover cropping and no-till soil management.

# **Climate Smart Agriculture**

# Dairy Digester Research and Development Program

### DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)

## **Cumulative Funding**

How much funding has the program received? \$195.8 million awarded.

How much has gone to implemented projects? \$180.0 million implemented.

## **Program Description**

#### What types of projects are funded?

Financial incentives for the design and construction of new digester systems that decrease methane emissions.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Dairy operations, dairy digester developers, and partnerships between these entities.

# How does the program target funds and provide benefits to priority populations?

Applicants are required to conduct outreach actions and describe how the community was involved in the local planning and environmental review processes for this project. Applicants summarize the results of this outreach; identify how concerns will be addressed and provide up to 3 letters of support. Scoring benefits are possible for projects benefiting priority populations.

# **2020 OUTCOMES**

\$69.1 M IMPLEMENTED

#### **EXPECTED BENEFITS**

7,088,263 MTCO, E GHG REDUCTIONS

66,518,098 GALLONS FUEL GENERATION

#### FUNDING DISTRIBUTION

\$47.6 M

TO BENEFIT PRIORITY POPULATIONS





## CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

# **Dairy Digester Research and Development Program**

## Dairy Farms Capturing Methane to Create Renewable Source of Fuel

The CalBioGas Kern County biogas cluster – or Kern Cluster – was developed by a joint venture between California Bioenergy, Chevron U.S.A. Incorporated, and several California dairy farmers. The Dairy Digester Research and Development Program has awarded grants totaling over \$17.6 million from California Climate Investments to the dairy operations in the Kern Cluster, which is comprised of eight family-owned dairy farms. Thanks to these funds, these dairies now capture and prevent the release of methane – a greenhouse gas 25 times more potent than carbon dioxide – and are creating a renewable source of fuel.

The Kern Cluster includes Maple Dairy, Trilogy Dairy, T&W Dairy, BV Dairy, Belonave Dairy, Western Sky Dairy, McMoo Farms, and Newhouse Dairy. Each dairy will send methane captured from newlyconstructed dairy digesters into a central upgrading facility, where it will be upgraded to renewable natural gas and injected into the local gas utility's pipeline for consumer and commercial use. Renewable natural gas has a negative carbon intensity lifecycle under the California Low-Carbon Fuel Standard, and the renewable natural gas will be used as a fossil fuel alternative in heavy-duty trucks and buses. Natural gas trucks emit 90 percent less oxides of nitrogen than diesel, which also helps improve local air quality. Pollutants such as oxides of nitrogen are precursors to smog and can cause or aggravate many health conditions.

"We are grateful to have been the recipient of [California Department of Food and Agriculture's] dairy digester grant awards," said Cal DeJager, co-owner of Western Sky Dairy. "Digesters are proven to be among the most cost-effective solutions in helping California achieve its ambitious climate policy goals. It is an honor to partner with the state in a way that preserves the viability of California's dairy industry while improving air quality benefits for every Californian."

In addition to helping convert methane emissions to fuel and reducing emissions, the construction of dairy digesters exemplifies a growing agricultural clean-tech industry in California's San Joaquin Valley.

"The benefits of these projects really go beyond just methane reductions", said Brian Wind, a thirdgeneration farmer and co-owner of T&W Dairy. "The investments made by California have led to the creation of new jobs which will have lasting impacts throughout the community."

# **Climate Smart Agriculture**

# **Healthy Soils Program**

#### DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)

## **Cumulative Funding**

How much funding has the program received? \$40.5 million appropriated.

How much has gone to implemented projects? \$34.1 million implemented.

### **Program Description**

#### What types of projects are funded?

Financial incentives for on-farm management practices that sequester carbon, including soil management, establishment of herbaceous and woody cover, and demonstration projects showcasing these practices.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Farmers, ranchers, and recognized tribes; demonstration project funding to educational institutions, conservation districts, and nonprofit organizations collaborating with farmers, ranchers and recognized tribes.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged communities are prioritized for funding. Benefits can include reducing air pollution and dust exposure for priority populations, increasing food access, as well as providing educational opportunities through schools and nonprofits.

# **2020 OUTCOMES**

\$25.0 M IMPLEMENTED

#### **EXPECTED BENEFITS**

235,500 MTCO, E GHG REDUCTIONS

> **31,785** ACRE RESTORATION

10,376 TREE PLANTINGS



## CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

# **Healthy Soils Program**

# Rebuilding Healthy Soil on the Urban Edge

Pamela Posey of Harpos Organics is revitalizing soil health on two acres of walnut trees that have been farmed for more than 40 years. Since her December 2017 purchase of the property, located on the urban edge of Chico, California, Posey has managed the land using healthy soil management practices. In her quest to restore the property from the ground up, Posey turned to the Healthy Soils Program and received a \$8,860 grant from California Climate Investments with a \$1,500 cost share to achieve



her goals of improving the health of the soil and providing increased biodiversity.

"The project will benefit the environment in several ways," Posey said. "Significant carbon sequestration will be achieved by planting cover crops, applying compost, and planting hedgerow and windbreak plants." She noted additional benefits such as increased water filtration in changing orchard floor management; improved air quality by reducing dust and eliminating mowing with permanent ground cover; and improved ecosystem services including avian, wildlife, beneficial insect, and pollinator habitat.

"Minimizing the need for expensive equipment by minimizing the need for regular mowing, supporting beneficial insect habitat, reducing the need for pesticides, and diversifying the cropping pattern, as well as buffering the parcel from neighboring activities will enhance the sustainability of this small parcel," Posey explained.

Pamela's Healthy Soils project is designed to create an agricultural parcel that is productive as well as sustainable. Increased biodiversity will enhance the walnut production and increase the viability of adding other crops in areas where the walnut trees have died or have been removed. Much of the production will be sold at local farmers' markets and at an on-farm stand.

# **Climate Resilience Planning**

# SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION (BCDC)

## **Cumulative Funding**

How much funding has the program received? \$4.7 million appropriated.

How much has gone to implemented projects? \$4.5 million implemented.

## **Program Description**

#### What types of projects are funded?

BCDC funds staff to work with project proponents to make Bay shoreline projects more resilient and to work towards regional resilience through vulnerability assessments and adaptation planning.

How to access funds? Legislative appropriation.

Who receives funds? BCDC.

# How does the program target funds and provide benefits to priority populations?

Benefits will reach priority populations through vulnerability assessments and adaptation planning involving at risk communities and amendment of BCDC's policies to address environmental justice and social equity.

# **2020 OUTCOMES**

\$1.7 M IMPLEMENTED





#### SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

# **Climate Resilience Planning**

## Bay Adapt: Regional Strategy for a Rising Bay

Supported by \$110,722 from California Climate Investments, a new initiative led by San Francisco Bay Conservation and Development Commission (BCDC) will create a roadmap for the Bay Area to adapt better and faster to the rising sea level.

The initiative, Bay Adapt: Regional Strategy for a Rising Bay, is led by BCDC's Coastal Resilience Planning team. The initiative is timely given that rising seas, driven by climate change, are likely to dramatically affect Bay Area residents' way of life. Flooding, storm surges, and groundwater rise threaten communities, infrastructure, and the natural spaces that make the Bay Area so beautiful. The cost of inaction is high: 4 feet of sea level rise – expected over the next 40 to 100 years – could impact nearly 200,000 existing and planned housing units, 28,000 residents who are particularly vulnerable to climate change, 190,000 existing and planned jobs, 5 million daily highway vehicle trips, 60,000 daily rail commuters, and 20,000 acres of Bay Area wetlands.

While much of the responsibility to adapt to rising sea levels lies at the local city or county level, localonly adaptation efforts alone will not add up to an adequate response to meet this regional challenge. This is because the Bay Area is a highly networked region where flooding to one area can have cascading effects to others. To fill this gap, California Climate Investments-funded staff at BCDC are bringing together Bay Area leaders to develop a joint platform of actions necessary to protect people and the natural and built environment from rising sea levels.

"Planning at a regional scale is extremely challenging because adapting to sea level rise lays bare tensions between competing priorities, neighboring cities, and visions for the future," says BCDC Planning Director Jessica Fain. "No single agency is responsible for solving our future flooding problem so a collaborative, coordinated approach is our best bet."

During the summer and fall of 2020, leaders, technical experts, and volunteers from around the Bay Area met virtually to identify creative solutions for sea level rise adaptation and distill them into a set of draft actions. Uniting these actions are guiding principles on the use of best-available climate science, the critical roles that frontline communities and local jurisdictions play, and the strong foundation of proactive adaptation efforts already underway.

To learn more about this project and follow the outcomes, visit bayadapt.org.

# Affordable Housing and Sustainable Communities

# Affordable Housing and Sustainable Communities Program

## CALIFORNIA STRATEGIC GROWTH COUNCIL (SGC)

## **Cumulative Funding**

How much funding has the program received? \$2,059.6 million allocated.

How much has gone to implemented projects? \$838.6 million implemented.

## **Program Description**

## What types of projects are funded?

Affordable housing loans and other capital grants for housingrelated infrastructure, sustainable transportation infrastructure, transportation-related amenities, and related programs.

#### How to access funds?

Apply through a statewide competitive process.

### Who receives funds?

Local government agencies or districts (e.g., housing, transit, redevelopment, or planning), developers, university, college, or school districts, and federally recognized tribes.

# How does the program target funds and provide benefits to priority populations?

At least 50 percent of funds are invested in and benefit disadvantaged communities (with project location determined by the site of the affordable housing development). Project scoring and selection takes into account community engagement during the development process and how the project addresses community-identified needs.

# **2020 OUTCOMES**

\$327.3 M IMPLEMENTED

#### **EXPECTED BENEFITS**

540,007 MTCO, E GHG REDUCTIONS

> 2,753 HOUSING UNITS

**2,359** AFFORDABLE HOUSING UNITS





## CALIFORNIA STRATEGIC GROWTH COUNCIL

# Affordable Housing and Sustainable Communities Program

## The Santa Ana Arts Collective

In June 2020, artists, their families, and low-income earners in Santa Ana began moving into new affordable homes funded in part by a \$12 million award from California Climate Investments through the Affordable Housing and Sustainable Communities program. In partnership with the Southern California Association of Governments, the Santa Ana Arts Collective (SAAC) development promotes sustainability and health through active transportation safety activities, supported by over .5 miles of bicycle facility improvements and 36 improved pedestrian crossings. The project also features a gallery space for resident and community artists, and Meta Housing is partnering with Western Community Housing to deliver onsite adult education services.

The SAAC has grabbed attention as the city's first affordable housing complex to provide a liveand-work experience for artists – a key recommendation in the 2016 Santa Ana Community Arts and Culture Master Plan. In addition, SAAC is the first development to use the city's adaptive reuse ordinance, transforming a mid-century commercial building into 57 energy-efficient housing units with rooftop solar and a Greenpoint energy efficiency rating. The Southern California Association of Nonprofit Housing recognized SAAC as its 2020 Rehabilitation Development of the Year.

With a population of 333,000, Santa Ana has the tenth-highest median rent in the country and 65 percent of renters qualify as rent-burdened. It is also a majority-minority city: Over 75 percent of residents identify as Latinx. The SAAC project team – the city of Santa Ana, Meta Housing Corporation, and the Southern California Association of Governments – reported having a list of 350 interested parties 3 months before the application due date, and quickly reached 100 percent occupancy.

SAAC provides a model for how projects can address specific community housing needs by changing land-use patterns and adapting existing structures while creating a more walkable, vibrant community and directly reducing greenhouse gasses and improving air quality. "It is rare to see a project as truly transformational," said Ali Pezeshkpour, a senior planner with the City of Santa Ana. "But the Santa Ana Arts Collective has transformed the lives of its residents and brought new life to a building and pivotal intersection in the heart of the city."

# Affordable Housing and Sustainable Communities

# Sustainable Agricultural Lands Conservation Program

## CALIFORNIA STRATEGIC GROWTH COUNCIL (SGC)

## **Cumulative Funding**

How much funding has the program received? \$212.8 million allocated.

How much has gone to implemented projects? \$46.4 million implemented.

## **Program Description**

### What types of projects are funded?

Protection of critical agricultural lands at risk of conversion to more GHG-intensive residential uses by facilitating conservation easements and Agricultural Conservation Plans.

#### How to access funds?

Apply through a statewide competitive process.

### Who receives funds?

Easement funding available to local and regional government entities and nonprofit organizations. Strategy and Outcome grants available to local governments in collaboration with other organizations, such as land trusts and open space districts.

# How does the program target funds and provide benefits to priority populations?

Projects benefiting disadvantaged communities receive higher application scores and have a lower requirement for matching funds. Benefits can include reducing flood risk and maintaining water quality for priority populations as well as providing educational opportunities through schools and nonprofits.

# **2020 OUTCOMES**

\$13.9 M IMPLEMENTED

#### **EXPECTED BENEFITS**

2,470,816 MTCO<sub>2</sub>E GHG REDUCTIONS

## 7,663 ACRE CONSERVATION

FUNDING DISTRIBUTION

# \$0.0 M

TO BENEFIT PRIORITY POPULATIONS





CALIFORNIA STRATEGIC GROWTH COUNCIL, DEPARTMENT OF CONSERVATION

# **Sustainable Agricultural Land Conservation Program**

## Jalama Cañon Ranch Project Profile

In the fifth round of its Sustainable Agricultural Lands Conservation program, the California Strategic Growth Council approved a \$1,550,000 grant from California Climate Investments to the Land Trust of Santa Barbara County (Land Trust) to purchase an easement that will permanently protect the 999acre Jalama Cañon Ranch. This year, with support from the California Department of Conservation and in partnership with the White Buffalo Land Trust (White Buffalo), the Land Trust focused on laying the groundwork for the agricultural easement so it can protect these agricultural and natural lands from conversion to more greenhouse gas-intensive uses.

Jalama will model regenerative agriculture at scale in a financially viable way; serve as a center for education, training, and scientific research; and demonstrate pathways for the rapid and broad adoption of regenerative agriculture locally, regionally and globally. White Buffalo will offer technical training and apprenticeship programs for current and aspiring farmers and ranchers. Their curriculum will focus on creating outcomes related to greenhouse gas-reducing soil health practices, carbon sequestration, and fire and drought resilience and include hands-on experience in Holistic Planned Grazing, agro-forestry, and onsite nutrient cycling.

Located near other protected lands, including the adjacent 24,000-acre Jack and Laura Dangermond Preserve, Jalama features grazing lands and a vineyard, 500 acres of significant natural resources, and varied habitats and wildlife corridors. With elevation ranging from 400 to 1,600 feet above sea level, the ranch contains distinct vegetation zones that will contribute to habitat resiliency.

"Working collaboratively with landowners, nonprofits, and government agencies we can sustain agriculture, promote economic viability and achieve conservation," said Meredith Hendricks, Executive Director for the Land Trust. "We are grateful for the Sustainable Agricultural Lands Conservation program funding and to our partners at the Department of Conservation for their role in making this innovative project a reality."

# **Climate Change Research Program**

## CALIFORNIA STRATEGIC GROWTH COUNCIL (SGC)

## **Cumulative Funding**

How much funding has the program received? \$34.0 million appropriated.

How much has gone to implemented projects? \$32.3 million implemented.

## **Program Description**

#### What types of projects are funded?

The program funds applied climate change research in California to help the State meet its climate change goals that is cross-sectoral, interdisciplinary, and partner-driven. Topics funded range from a focus on reducing carbon emissions to supporting clean technologies and community resilience.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Eligible research institutions, including the University of California, California State University, federally-funded national laboratories, nonprofit colleges and universities, and nonprofit research institutions. However, program guidelines require a funded nonacademic partner be included in the projects and that the work be driven by partner priorities.

# How does the program target funds and provide benefits to priority populations?

Research projects and partnerships must be designed to address and facilitate achieving climate outcomes in lowincome, disadvantaged, and climate vulnerable communities. This can be achieved through direct connection with communities and community-based organizations, explicit examination of replicability of projects in low-income and disadvantaged communities, or other mechanisms that demonstrate how research investments will be leveraged to support low-income and disadvantaged communities. The program builds these requirements into scoring to ensure projects are providing these connections and benefits.

# **2020 OUTCOMES**

\$4.8 M IMPLEMENTED



## CALIFORNIA STRATEGIC GROWTH COUNCIL

# **Climate Change Research Program**

# Coupling Community Knowledge with Big Data Tools to Facilitate Equitable Energy Transitions

In Los Angeles County, transitioning to clean, renewable energy will improve air quality and reduce the overall carbon footprint in California's most populous region. With a \$638,878 award from California Climate Investments through the Climate Change Research Program, a partnership led by the University of California, Los Angeles (UCLA) and Liberty Hill Foundation is helping to make this transition equitable, affordable, and beneficial for people



living in the area's priority populations. That means engaging these communities at all stages of the research.

Community solar enables renters to purchase power generated by local photovoltaic systems, helping to overcome some of the energy-transition barriers underserved communities face. Resilience centers serve community members by providing energy services during grid outages. To identify high-potential sites for community solar and resilience centers, UCLA and Liberty Hill collaborated with seven community-based organizations (CBOs) representing underserved communities to develop the Community Solar Opportunities Tool. The new interactive, web-based analytical tool uses cutting-edge data and analytics to identify, filter, and prioritize potential sites. Additionally, UCLA developed an "Energy 101" curriculum for CBO partners, containing key information about both technical and governance aspects of the energy system in California.

To determine whether these tools met the communities' needs, the research leads hosted a series of engagement workshops and events with regional, energy-oriented CBOs, learning about community-specific attitudes, interests, and concerns about sustainable energy system transformations.

"The workshops were a transformative experience for me to understand the current structures of our utility system," said Jeshow Yang with the Asian Pacific Islander Forward Movement. "I'm excited to take the next steps in using the tool to find potential sites for solar panels that would contribute to our Sustainability and Climate Action Plan."

UCLA and Liberty Hill's collaborative research model included fully compensating the partner CBOs: the Asian Pacific Islander Forward Movement, Active San Gabriel Valley, East Los Angeles Community Corporation, East Yard Communities, Pacoima Beautiful, Redeemer Community Partnership, Social Justice Learning Institute, and Tenemos Que Reclamar Y Unidos Salvar La Tierra (TRUST) South LA.

As a result, these tools – informed by deep insights from underserved Angelenos – will help communities develop plans or case studies to support implementation of energy transitions in their own neighborhoods.

# **Technical Assistance**

## CALIFORNIA STRATEGIC GROWTH COUNCIL (SGC)

## **Cumulative Funding**

How much funding has the program received? \$13.5 million allocated.

How much has gone to implemented projects? \$6.9 million implemented.

## **Program Description**

#### What types of projects are funded?

Application assistance, partnership development and capacity building activities for eligible California Climate Investments applicants.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Technical assistance providers.

# How does the program target funds and provide benefits to priority populations?

Priority populations and the governments and organizations that serve them are generally prioritized to receive technical assistance. This assistance helps under-resourced communities apply for and successfully implement California Climate Investments projects that offer a myriad of public health and economic benefits to the communities they serve.

# **2020 OUTCOMES**

\$1.6 M IMPLEMENTED



other areas of California

## CALIFORNIA STRATEGIC GROWTH COUNCIL

# **Technical Assistance**

# Vision, Partnership, and Technical Assistance Support Tribal Project in Arcata

With the help of technical assistance providers funded by the California Strategic Growth Council's California Climate Investments Technical Assistance program (CCI TA), Arcata 30<sup>th</sup> Street Commons became the first tribal led project funded by California Climate Investments through the Affordable Housing and Sustainable Communities (AHSC) program. The project, proposed by the Yurok Indian Housing Authority (YIHA), earned a \$11.4 million award and exemplifies how a strong vision, combined with



partnership, technical assistance, and investment can help transform an under resourced community.

When the Yurok Indian Housing Authority and the city of Arcata decided to pursue AHSC funding, they sought support through the California Strategic Growth Council's CCI TA program to bring their project to fruition. The California Coalition for Rural Housing – a technical assistance provider for the AHSC program – leveraged its relationships and experience working with Tribal Governments and rural communities to support the Yurok Tribe in developing its part of project while the Institute for Local Government, working through the California Climate Investments-funded BOOST pilot program, supported the city of Arcata.

Arcata 30<sup>th</sup> Street Commons will provide 36 multifamily affordable units for low-income households as well as a number of integrated transportation investments in the city of Arcata. This project stands out for its culturally important features, developed through deep community engagement conducted by the Tribal Council, with a particular emphasis on responding to the needs of tribal elders. As a result, the project includes a community garden where the Native Foods Council, a Yurok youth-led nonprofit, will work with residents to share knowledge and traditions of the Yurok culture. In addition, the Yurok Tribe ensured the project site will include wetlands restoration, green spaces, native tree and vegetation plantings, nonnative plant removal, and the construction of a traditional cultural area and play area onsite for youth.

"This project represents the first time that Yurok citizens will have access to affordable housing in an area where there is a university, a Native American health clinic, transportation, and all of the other quality-of-life improving amenities Arcata has to offer," said Richard Myers, the Chairperson of YIHA's Board of Commissioners. "We are extremely excited about this partnership with the city of Arcata. We are equally proud to be the first tribe to receive an Affordable Housing and Sustainable Communities grant, which is going to create numerous positive opportunities for tribal and non-tribal citizens."

# Transformative Climate Communities Program

## CALIFORNIA STRATEGIC GROWTH COUNCIL (SGC)

## **Cumulative Funding**

How much funding has the program received? \$241.3 million appropriated.

How much has gone to implemented projects? \$164.8 million implemented.

## **Program Description**

#### What types of projects are funded?

Implementation Grants fund community-driven, collaborative projects that integrate a variety of California Climate Investment infrastructure projects within a five-square mile area to create transformative change at the neighborhood level. Planning Grants fund planning activities to prepare disadvantaged communities for future funding opportunities that align with these objectives.

#### How to access funds?

Apply through a statewide competitive process.

#### Who receives funds?

Community-based organizations, local governments, non-profit organizations, philanthropic organizations and foundations, faith based organizations, coalitions or associations of non-profit organizations, community development finance institutions, community development corporations, joint powers authorities, and tribal governments.

# How does the program target funds and provide benefits to priority populations?

For Implementation Grants, the majority of the project area must comprise census tracts within the top ten percent of disadvantaged communities by CalEnviroScreen ranking, with the remainder of the project occurring within disadvantaged or low-income community census tracts. For Planning Grants, all census tracts must be disadvantaged communities. TCC projects must demonstrate community engagement in all phases and maximize climate, public health, environmental, workforce, and economic benefits to communities.

# **2020 OUTCOMES**

\$41.7 M IMPLEMENTED

#### **EXPECTED BENEFITS**

45,107 MTCO<sub>2</sub>E GHG REDUCTIONS

> 55,826,082 VMT reductions

103 AFFORDABLE HOUSING UNITS

> 3,184 TREE PLANTINGS

#### FUNDING DISTRIBUTION

## \$36.3 M

TO BENEFIT PRIORITY POPULATIONS


#### CALIFORNIA STRATEGIC GROWTH COUNCIL

#### Transformative Climate Communities Program

#### Watts Rising: TCC Investment in Social Capital Supports Swift Adaptation to COVID-19 Challenges

The COVID-19 pandemic has exacerbated existing food insecurity in the Watts community in Los Angeles, where the Transformative Climate Communities Program (TCC) in 2017 made a \$33.25 million investment of California Climate Investment funds to implement the Watts Rising vision. To ensure continued access to fresh produce throughout the pandemic, the Watts Rising collaborative



partners harnessed their existing virtual community engagement events as a platform to distribute food and critical public health information.

Watts Rising exemplifies the power of investing in social resilience, which enables communities to weather unexpected challenges. Since the projects were already "up and running prior to [the pandemic], it was just about adapting it, so it can be COVID-safe," said Haleemah Henderson of the Watts Labor Community Action Committee.

Two community garden projects funded through TCC, Watts Community Healing Tech Gardens and MudTown Farms, after adjusting to new health standards set by the Centers for Disease Control, are continuing to distribute fresh produce to the community through the pandemic to alleviate food insecurity.

"I know pretty much everyone has been affected food security-wise," said Ava Post, with MudTown Farms. "The need for produce has gone up, so it's been great to be able to continue to offer the service especially when people need it the most."

The Safe Passages to School program – part of the TCC-funded Walk Bike Watts project – also pivoted its focus to improve food security after schools went remote. We Care Outreach distributed meals in collaboration with East Side Riders.

Community engagement is an essential component of all TCC-funded projects, and Watts Rising had planned many in-person events and activities. To adapt to the pandemic, the Watts Rising partners moved meetings and classes online, prioritized social media and other digital outreach, and sent mailers and distributed flyers in lieu of face-to-face engagement.

Walk Bike Watts responded quickly to the stay-at-home order, canceling "the Walk to School day and the Bike to School day," said Jackie Valladares, with Urban Peace Institute. "But our monthly meetings continued. We had a good momentum of engaging everyone...We saw that there were so many things happening quickly, [so] we doubled our virtual meetings to twice a month" to help share important public health information.

TCC's investment in social capital is helping the Watts Rising Collaborative implement projects that improve community members' day-to-day lives and build resilience in the face of COVID-19.

# **APPENDICES**

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### Appendix A: Additional Background Information on California Climate Investments

#### **Cap-and-Trade Auction Proceeds**

California's efforts to reduce greenhouse gas emissions from stationary sources began in 2006 with the passage of the California Global Warming Solutions Act of 2006, otherwise known as AB 32 (Chapter 488, Statutes of 2006). AB 32 set a target of returning to 1990 greenhouse gas emission levels by 2020 and achieved the emission reduction target four years early while the state's economy grew at a faster rate than the national average. SB 32 (Chapter 249, Statutes of 2016) established a 2030 greenhouse gas emission reduction target of 40 percent below 1990 levels. The 2030 target has put California on the path to the state's goal of achieving an 80 percent reduction of greenhouse gas emissions compared to 1990 levels by 2050.<sup>54</sup>

California's 2017 Climate Change Scoping Plan describes the state's strategy for achieving its 2030 climate goals by building on the state's successes to date, proposing to strengthen established programs while further integrating efforts to reduce both greenhouse gas emissions and air pollution.<sup>55</sup> The Scoping Plan, which is updated every five years, identifies a suite of cost-effective and technologically-feasible measures for reducing greenhouse gas emissions, including California's Capand-Trade program, which is an integral part of the state's strategy to meet its climate goals.

The Cap-and-Trade program is a market-based system that establishes an annual declining limit – or cap – on about 80 percent of statewide greenhouse gas emissions from the largest polluters ("covered entities") in the state. The Cap-and-Trade program sets a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. Covered entities must obtain allowances equal to their emissions. When these entities reduce emissions with equipment upgrades or efficiency improvements, the number of allowances they need for compliance is reduced. Covered entities may also use a limited amount of offsets, in addition to allowances, for compliance. Offset credits are issued for real, permanent, quantified, verified, additional, and enforceable greenhouse gas emissions reductions or carbon sequestration in sectors not covered by the Cap-and-Trade program.

A portion of allowances is freely allocated to covered entities. For electric and natural gas utilities, the value of freely allocated allowances must be used to benefit ratepayers to protect against energy cost spikes and to invest in projects to procure more renewable energy or support energy efficiency efforts. For more information on utilities' use of allowance value, see the Electric Utility and Natural Gas Supplier Investments section below. Large industrial facilities also receive a portion of allowances at no cost to minimize leakage per AB 32.<sup>56</sup> The remaining allowances are made available for sale at quarterly auctions.<sup>57</sup>

Proceeds from the sale of state-owned allowances are deposited into the GGRF to be used for California Climate Investments. Allowance auctions have generated \$14.9 billion in proceeds to date (Figure 9). Upon the creation of the GGRF, the Legislature established a set of requirements for the use of the funds, including that the funds must be used to facilitate greenhouse gas emission reductions, benefit priority populations, and maximize other environmental, public health, and economic benefits

<sup>54</sup> Executive Order S-3-05, 2005

<sup>55</sup> arb.ca.gov/cc/scopingplan/scoping\_plan\_2017.pdf

<sup>56 &</sup>quot;Leakage" refers to a reduction in emissions of greenhouse gases within the State that is offset by an increase in emissions of greenhouse gases outside the State attributable to a transfer of production to a jurisdiction not covered by the cap.

<sup>57</sup> Additional details on allowance allocation are available at arb.ca.gov/resources/documents/cap-and-trade-programallowance-distribution-factsheet.

where applicable and to the extent feasible. For more information on the legislative requirements for the use of GGRF funds and other legislation related to California Climate Investments, visit ww2.arb. ca.gov/resources/documents/ccilegislativeguidance.



#### **Figure 9: Cumulative State Auction Proceeds**

#### **Electric Utility and Natural Gas Supplier Investments**

Electrical distribution utilities and natural gas suppliers are participants in the Cap-and-Trade program. The investor-owned electric utilities and natural gas utilities must consign all, or some, allowances to be sold at quarterly auctions. These entities must use their auction proceeds for the benefit of ratepayers and annually report to CARB on how the funds were spent.

The primary use of auction proceeds by electric utilities is to fund distributions to ratepayers, such as the California Climate Credit, which has provided direct bill credits to customers since 2014 to protect households and eligible small businesses from costs associated with complying with the Cap-and-Trade regulation. Electric utilities have also used a portion of those proceeds to fund clean energy and energy efficiency projects. In 2018, natural gas suppliers began providing households with an annual natural gas Climate Credit. CARB posted the first summary of natural gas supplier use of allowance value in 2020, covering the period between 2015 and 2018.

Summaries of how utilities utilized their auction proceeds can be found at ww3.arb.ca.gov/cc/cap-and-trade /allowanceallocation/edu-ng-allowance-value.htm.

#### **Investment Plan**

State law 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 Auction Proceeds. The Third Investment Plan was submitted to the Legislature in February 2019 and provided three main recommendations to the Legislature:

- Continue to invest in existing programs and prioritize new programs that:
  - emphasize meaningful community input in program modifications and project solicitation and design, and fund community-led projects, both community-wide and small-scale, and
  - achieve near-term climate and health benefits and contribute to long-term transformation to low-carbon communities and ecosystems that are adaptable and resilient.
- Provide funding certainty over multiple years for more California Climate Investments programs to better support legislative priorities.
- Support job training and apprenticeship opportunities, with a focus on disadvantaged communities, to provide the state's workforce with the job skills necessary to transition to a low-carbon economy.

The Fourth Investment Plan, which will cover Fiscal Years 2022–23 through 2024–25, will be submitted to the Legislature in 2022.<sup>58</sup>

## **Funding Guidelines**

State law requires CARB to develop guidance for all state agencies that receive appropriations from the GGRF for California Climate Investments programs, including guidance on reporting, quantification methods, and maximizing benefits to disadvantaged communities. Administering agencies use these Funding Guidelines to design and implement programs that meet the state's statutory and policy objectives for California Climate Investments. The Funding Guidelines ensure that investments facilitate greenhouse gas emission reductions, benefit disadvantaged communities and low-income communities and households, and provide transparency and accountability regarding the use of funds. CARB last updated the Funding Guidelines in 2018. The updated Funding Guidelines provide additional flexibility for new programs that facilitate greenhouse gas emission reductions and added requirements for reporting co-benefits and jobs benefits to CARB.

# **Project Reporting**

CARB requires administering agencies to report project status and expected benefits semiannually. CARB relies on agencies to provide accurate project-level data, but supports agencies' project tracking and reporting efforts by supplying program-specific reporting templates and aggregating the data reported. Project reporting provides transparency on the use of Cap-and-Trade Auction Proceeds and project outcomes, including benefits to priority populations and expected environmental, economic, and public health benefits.<sup>59</sup>

<sup>58</sup> For more information, visit arb.ca.gov/resources/documents/california-climate-investments-investment-plan.

<sup>59</sup> Detailed data are available at *caclimateinvestments.ca.gov*, including information on project location, greenhouse gas emission reductions, co-benefits, and benefits to priority populations.

## Greenhouse Gas and Co-Benefit Quantification Methodologies

As part of providing guidance to administering agencies, CARB develops quantification methodologies supported by empirical research to estimate project-level greenhouse gas benefits along with other project benefits. CARB currently maintains 42 quantification methodologies along with accompanying calculator tools. Administering agencies may use expected benefits when selecting projects to fund and to demonstrate that investments facilitate greenhouse gas emission reductions.

Administering agencies must use a CARB quantification methodology and report expected project benefits to CARB if a quantification methodology exists for that project type. In some cases, certain project types may not have quantifiable greenhouse gas emission reductions. For those project types, administering agencies are required to provide a qualitative assessment to demonstrate how expenditures facilitate greenhouse gas emission reductions and support state goals.

CARB and administering agencies document a wide array of environmental, economic, and public health co-benefits through reporting. The co-benefits resulting from GGRF investments provide significant value to the state beyond greenhouse gas emission reductions, including air pollutant emission reductions, the construction of affordable housing units near transit, and improved resiliency of California's natural and working lands. Some co-benefits are derived from project details or outputs from CARB calculator tools, while others are assessed using CARB's standalone co-benefit assessment methodologies. CARB continuously works to update and improve upon these tools and methodologies to capture additional co-benefits generated by implemented projects.

### **Project Outcomes**

Administering agencies are required to report project outcomes on a subset of operational projects funded by each program. Reporting on project outcomes provides information that can be used to evaluate project and program effectiveness, and help improve programs and projects going forward. In order to help address challenges arising from project outcome reporting and support better data collection and evaluation, CARB contracted with the University of California, Davis Policy Institute for Energy, Environment, and the Economy to evaluate existing project outcome reporting guidance and requirements in 2019. The Policy Institute for Energy, Environment, and the Economy to refine existing data collection methods to utilize best practices for data collection and to expand the types of data being collected to include additional benefits to the public. Work under this contract is expected to conclude in June 2021.

Agency	Program	Subprogram	Total GGRF Implemented (\$M)	Total Project Cost (\$M)	Funds from Additional Sources (\$M)	Leveraged Ratio (Funds from Additional Sources/GGRF Implemented)
	Community Air	Community Air Grants	15.0	17.0	1.9	0.1
	Protection	Community Air Protection Funds	322.7	567.5	244.8	0.8
	Funding Agricultural Rep Emission Reduction	placement Measures for	150.4	296.8	146.4	1.0
		Advanced Technology Demonstration and Pilot Projects	79.2	127.5	48.3	0.6
		Clean Cars 4 All	73.0	74.0	0.9	0.0
	Low-Carbon Transportation	Clean Mobility for Schools	24.6	24.8	0.2	0.0
		Clean Mobility Options	10.7	17.1	6.4	0.6
		Clean Vehicle Rebate Project	817.3	3,297.8	2,480.5	3.0
California Air Resources Board		Clean Off-Road Equipment Voucher Incentive Project	18.8	36.0	17.2	0.9
		Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project	271.7	1,004.4	732.6	2.7
		Outreach, Education and Awareness	6.0	11.0	5.0	0.8
		Rural School Bus Pilot Project	35.1	36.0	0.9	0.0
		Zero and Near Zero-Emissions 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 Smc	ke Monitoring Program	3.9	4.0	0.1	0.0
	Woodsmoke Reduction		6.8	9.8	3.1	0.5
California Coastal Commission	Coastal Resilience Planr	ing	2.1	5.5	3.5	1.7

# Appendix B: Cumulative California Climate Investments Leveraged Funds

Agency	Program	Subprogram	Total GGRF Implemented (\$M)	Total Project Cost (\$M)	Funds from Additional Sources (\$M)	Leveraged Ratio (Funds from Additional Sources/GGRF Implemented)
California Department of Community Services and Development California Department of		Multi-Family Energy Efficiency and Renewables	37.2	72.8	35.6	1.0
	Low-Income Weatherization	Single-Family Energy Efficiency and Solar Photovoltaics	60.8	80.1	19.4	0.3
		Single-Family Solar Photovoltaics	44.2	64.9	20.7	0.5
California Department of Fish and Wildlife	and Solar Photovoltaics 44.2 64.9   Single-Family Solar Photovoltaics 44.2 64.9   Wetlands and Watershed Restoration 36.9 85.8   Alternative Manure Management 60.9 69.9   Dairy Digester Research and Development 180.0 548.7   Healthy Soils 34.1 44.4   State Water Efficiency and Enhancement 61.8 99.8		48.9	1.3		
California Department of Food and Agriculture		Alternative Manure Management	60.9	69.9	9.1	0.1
	Climate Smart Agriculture	Dairy Digester Research and Development	180.0	548.7	368.7	2.0
		Healthy Soils	34.1	44.4	10.3	0.3
		State Water Efficiency and Enhancement	61.8	99.8	38.0	0.6
	Fire Prevention		318.4	331.6	13.2	0.0
California Department of	Sustainable Forests	Forest Health	317.8	526.9	209.1	0.7
Forestry and Fire Protection		Forest Health Research	5.4	8.6	3.1	0.6
		Urban and Community Forestry	56.2	82.9	26.6	0.5
California Department of		Food Waste Prevention and Rescue Grants	20.2	35.6	15.4	0.8
Resources Recycling and Recovery	Waste Diversion	Organics and Recycling Manufacturing Loans	7.7	139.2	131.5	17.0
		Organics Grants	72.5	341.1	268.6	3.7
California Department of Resources Recycling and Recovery	Waste Diversion	Recycled Fiber, Plastic, and Glass Grants	25.7	118.0	92.4	3.6
California Department of	Active Transportation		10.0	16.3	6.3	0.6
Transportation	Low-Carbon Transit Options		558.3	7,555.7	6,997.4	12.5

Agency	Program	Subprogram	Total GGRF Implemented (\$M)	Total Project Cost (\$M)	Funds from Additional Sources (\$M)	Leveraged Ratio (Funds from Additional Sources/GGRF Implemented)
California Department of	State Water Project: Tur	bines	20.0	43.1	23.1	1.2
Water Resources	Water-Energy Grant		36.7	41.4	4.8	0.1
	Food Production Investment	nent	103.2	155.2	52.0	0.5
California Energy Commission California High-Speed	Low-Carbon Fuels Prod	8.3	22.0	13.6	1.6	
	Renewable Energy for Agriculture		9.5	14.9	5.4	0.6
California High-Speed Rail Authority	High-Speed Rail Project		2,284.8	77,300.0	75,015.2	32.8
California Natural	Urban Greening		117.4	193.3	76.0	0.6
Resources Agency	Regional Forest Health Collaboratives		4.6	6.3	1.7	0.4
California State Coastal Conservancy	Climate Ready		66.5	100.9	34.4	0.5
California State Transportation Agency	Transit and Intercity Rail Capital		389.9	3,852.8	3,462.9	8.9
	Affordable Housing	Affordable Housing and Sustainable Communities	838.6	4,162.5	3,323.9	4.0
California Strategic	and Sustainable Communities	Sustainable Agricultural Lands Conservation	46.4	78.9	32.5	0.7
Growth Council	Climate Change Research		32.3	33.6	1.3	0.0
	Transformative Climate	Communities	164.8	409.0	244.2	1.5
	Technical Assistance		6.9	7.1	0.2	0.0
California Wildfire Conservation Board	Climate Adaptation and	Resiliency	11.5	29.1	17.6	1.5
		Total	5,833.6	25,448.9	19,615.4	3.4

# Appendix C: 2020 Statistics on Competitive Project Proposals Received

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Agency	Frogram	Type of Awara Kecipieni(s)	Number	Amount Requested	Number	Amount Awarded	Funds Requested
	Clean Mobility for Schools	Awarded Directly to Recipient	7	\$55,000,000	3	\$24,567,500	224%
	Community Air Grants	Awarded Directly to Recipient	47	\$5,337,026	29	\$5,337,026	100%
California Air Resources Board	Funding Agricultural Replacement Measures for Emission Reductions	Awarded to an Intermediary	18	\$64,250,000	18	\$48,187,500	133%
	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project	Awarded to an Intermediary	2	\$142,000,000	1	\$105,435,000	135%
	Wildland Fire Smoke Monitoring Program	Awarded Directly to Recipient	20	\$1,559,312	20	\$1,559,312	100%
California Department	Alternative Manure Management Program	Awarded Directly to Recipient	79	\$50,800,000	13	\$8,931,448	569%
of Food and Agriculture	Dairy Digester Research and Development Program	Awarded Directly to Recipient	107	\$155,977,631	56	\$85,673,502	182%
California Department of Food and Agriculture	Healthy Soils	Awarded Directly to Recipient	617	\$43,849,059	339	\$25,255,317	174%
	Fire Prevention Grant Program	Awarded Directly to Recipient	250	\$207,329,882	55	\$43,510,316	477%
California Department	Forest Health	Awarded Directly to Recipient	44	\$164,055,435	23	\$73,355,490	224%
Protection	Forest Health Research	Awarded Directly to Recipient	31	\$10,784,380	13	\$2,627,486	410%
	Urban and Community Forestry	Awarded Directly to Recipient	118	\$81,380,696	44	\$37,126,042	219%
California Department	Community Composting Program	Awarded Directly to Recipient	3	\$4,050,000	1	\$1,350,000	300%
and Recovery	Organics Grants	Awarded Directly to Recipient	31	\$80,151,746	6	\$15,800,000	507%
California Energy Commission	Food Production Investment Program	Awarded Directly to Recipient	64	\$178,166,099	30	\$85,393,989	209%
California Energy Commission	Low-Carbon Fuels Production	Awarded Directly to Recipient	12	\$53,024,111	4	\$12,500,000	424%
California Natural Resources Agency	Regional Forest Health Collaboratives	Awarded Directly to Recipient	5	\$950,000	1	\$950,000	100%

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A	Drogram	Turns of Assessed Desiniant(s)	Propo	osals Received	Propo	Selected	
Адепсу	Program	Type of Awara Kecipient(s)	Number	Amount Requested	Number	Amount Awarded	Funds Requested
California State Transportation Agency	Transit and Intercity Rail Capital Program	Awarded Directly to Recipient	45	\$4,841,988,272	17	\$221,700,000	2184%
California State Water Resources Control Board	Safe and Affordable Drinking Water Fund	Awarded Directly to Recipient	16	\$54,776,564	13	\$41,060,237	133%
California Strategic Growth Council	Affordable Housing and Sustainable Communities	Awarded Directly to Recipient	55	\$1,075,496,259	26	\$552,349,862	195%
	Climate Change Research Program	Awarded Directly to Recipient	37	\$27,459,159	6	\$4,749,952	578%
	Sustainable Agricultural Lands Conservation	Awarded Directly to Recipient	44	\$69,000,693	37	\$56,896,867	121%
	Technical Assistance Program	Awarded to an Intermediary	28	\$13,364,615	5	\$3,176,851	421%
California Wildlife Conservation Board	Climate Adaptation and Resiliency Program	Awarded Directly to Recipient	73	\$42,226,488	14	\$7,633,717	553%
California Workforce Development Board	Low-Carbon Economy Workforce	Awarded Directly to Recipient	17	\$16,250,224	12	\$10,106,680	161%
State Coastal Conservancy	Climate Ready Program	Awarded Directly to Recipient	12	\$6,397,943	6	\$2,850,000	224%

# Appendix D: Cumulative Budgetary Expenditures

Agency	Program	Appropriations (\$M) <sup>60</sup>	State Ops (\$M)	Local Assistance (\$M)	Capital Outlay (\$M)	Cumulative Budgetary Expenditures (\$M)	Cumulative Program Administration Costs (\$M) <sup>61</sup>
California Air Resources Board	Low-Carbon Transportation; Funding Agricultural Replacement Measures for Emission Reductions; Community Air Protection; Woodsmoke Reduction; Prescribed Fire Smoke Monitoring; Flourinated Gases Emission Reduction; Program Administration	\$3,278.5	\$192.9	\$3,040.9	\$0.0	\$3,233.9	\$94.0
California Coastal Commission*	Local Coastal Program	\$4.5	\$0.7	\$3.6	\$0.0	\$4.3	\$0.2
California Conservation Corps*	Training and Workforce Development	\$55.9	\$25.3	\$0.0	\$0.0	\$25.3	\$0.8
California Department of Community Services and Development	Low-Income Weatherization	\$211.7	\$11.1	\$202.7	\$0.0	\$213.9	\$11.1
California Department of Fish and Wildlife*	Wetlands and Watershed Restoration	\$46.7	\$5.2	\$36.9	\$0.0	\$42.1	\$5.2
California Department of Food and Agriculture*	State Water Efficiency and Enhancement; Alternative Renewable Fuels; Dairy Methane; Healthy Soils	\$398.6	\$85.8	\$251.8	\$0.0	\$337.6	\$17.2
California Department of Forestry and Fire Protection*	Community Fire Planning and Preparedness; Fire Prevention; Forest Carbon Plan Implementation; Sustainable Forests	\$1,041.3	\$742.2	\$9.4	\$0.0	\$751.6	\$149.5
California Department of Resources Recycling and Recovery*	Food Waste Prevention and Rescue Grants; Organics and Recycling Manufacturing Loans; Organics Grants; Recycling Manufacturing Grants	\$141.3	\$13.3	\$113.1	\$0.0	\$126.5	\$3.3
California Department of Transportation	Low-Carbon Transit Operations; Active Transportation	\$616.7	\$0.0	\$380.8	\$0.0	\$380.8	\$0.0
California Department of Water Resources	State Water Project Turbines; Water-Energy Grant	\$69.3	\$2.8	\$46.0	\$20.0	\$68.8	\$2.8

<sup>60</sup> Certain administering agencies have provisional language allowing for the transfer of appropriated funds to other state agencies to implement California Climate Investments programs.

<sup>61</sup> 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.

Agency	Program	Appropriations (\$M) <sup>60</sup>	State Ops (\$M)	Local Assistance (\$M)	Capital Outlay (\$M)	Cumulative Budgetary Expenditures (\$M)	Cumulative Program Administration Costs (\$M) <sup>61</sup>
California Energy Commission*	Food Protection Investment; Renewable Energy for Agriculture; Low-Carbon Fuel Production	\$146.5	\$16.6	\$121.0	\$0.0	\$137.7	\$4.1
California Environmental Protection Agency	Transition to a Carbon-Neutral Economy	\$2.6	\$3.0	\$0.0	\$0.0	\$3.0	\$0.0
California High-Speed Rail Authority	High-Speed Rail Project	\$3,563.8	\$0.0	\$0.0	\$2,284.8	\$2,284.8	\$0.0
California Natural Resources Agency*	Urban Greening; Regional Forest and Fire Capacity	\$176.5	\$1.4	\$140.6	\$0.0	\$142.0	\$2.4
California State Coastal Conservancy*	Climate Ready	\$7.0	\$0.3	\$6.7	\$0.0	\$7.0	\$0.3
California State Transportation Agency	Transit and Intercity Rail Capital	\$1,324.8	\$4.5	\$1,272.1	\$0.0	\$1,276.6	\$4.6
California State Water Resources Control Board**	Safe and Affordable Drinking Water Fund	\$149.3	-	-	-	-	-
California Strategic Growth Council*	Affordable Housing and Sustainable Communities; Transformative Climate Communities; Technical Assistance; Sustainable Agricultural Lands Conservation; Climate Change Research	\$2,750.1	\$85.5	\$994.9	\$0.0	\$1,080.4	\$48.9
California Wildlife Conservation Board	Climate Adaptation and Conservation Easements	\$20.0	\$0.0	\$6.9	\$0.0	\$6.9	\$0.0
California Workforce Development Board*	Workforce Development Board	\$32.9	\$2.1	\$0.0	\$0.0	\$2.1	\$1.0
Governor's Office of Emergency Services	Wildfire Response and Readiness	\$52.2	\$26.1	\$3.8	\$0.0	\$29.8	\$26.1
SF Bay Conservation and Development Commission*	Coastal Resilience Planning	\$4.7	\$2.9	\$0.5	\$0.0	\$3.4	\$0.2
	Totals for Program	\$14,095.0	\$1,221.9	\$6,631.6	\$2,304.8	\$10,158.4	\$371.7

Agency	Program	Appropriations (\$M) <sup>60</sup>	State Ops (\$M)	Local Assistance (\$M)	Capital Outlay (\$M)	Cumulative Budgetary Expenditures (\$M)	Cumulative Program Administration Costs (\$M) <sup>61</sup>
California Air Resources Board	Statewide Administration	\$78.6	\$68.9	\$0.0	\$0.0	\$68.9	\$68.9
Fund Controller Agencies	Controller's Fees and Adjustments	\$60.4	\$65.8	\$0.0	\$0.0	\$65.8	\$65.8
Office of Environmental Health and Hazard Assessment	Identification of Disadvantaged Communities	\$7.0	\$5.5	\$0.0	\$0.0	\$5.5	\$5.5
Other	Pension Payments	\$0.0	\$1.1	\$0.0	\$0.0	\$1.1	\$1.1
Totals for Programs Including Administration and Support		\$14,241.0	\$1,363.3	\$6,631.6	\$2,304.8	\$10,299.7	\$513.1

\*

Denotes agencies which had difficulties closing in FI\$Cal and as such provided estimated budgetary expenditures. The State Water Resources Control Board was unable to close in FI\$Cal or provide estimated budgetary expenditures. \*\*

#### **California Climate Investments**

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