

Memorandum

To: Greenhouse Gas Reduction Fund Program
California Air Resources Board

Date: December 4, 2023
Telephone: (916) 903-4686

From: **California Energy Commission**
Susan Mills, Supervisor, Equitable Building Decarbonization Branch, Direct Install Implementation
715 P Street
Sacramento CA 95814-5512

Subject: **GREENHOUSE GAS REDUCTION FUND: CALIFORNIA ENERGY COMMISSION
EXPENDITURE RECORD FOR FISCAL YEARS 2022-2023 AND 2023-2024 –
EQUITABLE BUILDING DECARBONIZATION PROGRAM**

This Attestation Memorandum documents the California Energy Commission completed the attached Expenditure Record on November 17, 2023, for the Equitable Building Decarbonization Program. The Expenditure Record is consistent with the statutory requirements of Government Code Section 16428.9 to support expenditures from the Greenhouse Gas Reduction Fund.

This Attestation Memorandum and Expenditure Record will be submitted to the California Air Resourced Board for public posting on its website at: www.arb.ca.gov/caclimateinvestments. Questions on this Attestation Memorandum or Expenditure Record may be directed to Susan Mills by email at susan.mills@energy.ca.gov or by phone at (916) 903-4686.

Bryan Cash

Wade Crowfoot, Secretary
California Natural Resources Agency



Drew Bohan, Executive Director
California Energy Commission

Attachment: Greenhouse Gas Reduction Fund: Expenditure Record

Greenhouse Gas Reduction Fund: Expenditure Record

California Energy Commission
Equitable Building Decarbonization Program

Authorizing legislation:

Appropriations from the Greenhouse Gas Reduction Fund:

Section 2.00 of the Budget Act of 2022, Assembly Bill (AB) 179 (Chapter 249, Statutes of 2022), as amended by AB 103 (Chapter 33, Statutes of 2023), appropriated \$60 million in Greenhouse Gas Reduction Funds (GGRF) to the California Energy Commission (CEC) for the Equitable Building Decarbonization (EBD) Program.

Appropriation 1) Item 3360-001-3228 (\$6,000,000 – Support)

Appropriation 2) Item 3360-101-3228 (\$54,000,000 – Local Assistance)

Section 2.00 of the Budget Act of 2023, Senate Bill (SB) 101 (Chapter 12, Statutes of 2023), as amended by AB 102 (Chapter 38, Statutes of 2023), appropriated \$345 million in GGRF to the CEC for the EBD Program.

Appropriation 1) Item 3360-001-3228 (\$34,500,000 – Support)

Appropriation 2) Item 3360-101-3228 (\$310,500,000 – Local Assistance)

The table below shows the GGRF appropriations for the EBD Program for Fiscal Year (FY) 22-23 and 23-24.

Equitable Building Decarbonization Program GGRF Budget (Millions) Table

	2022–2023	2023–2024	Total
Greenhouse Gas Reduction Fund	\$60	\$345	\$405

Source: 2023-2024 California State Budget

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

Agency that will administer funding:

- The CEC is the administering agency and as such will administer funds through a competitive funding opportunity to three third-party regional administrators which will implement the statewide direct install portion of the EBD Program. The CEC may also expend funds through additional statewide contracts to support the regional administrators and EBD Program.

Amount of proposed GGRF expenditure and appropriation reference:

- The total GGRF expenditure is \$405 million for the EBD Direct Install Program over FY 22-23 and FY 23-24.
 - A GGRF expenditure of \$60 million for FY 22-23 per Section 2 [3360-001-3228 and 3360-101-3328] of the Budget Act of 2022, as amended by AB 103 (Chapter 33, Statutes of 2023).
 - A GGRF expenditure of \$345 million for FY 23-24 per Section 2 [3360-001-3228 and 3360-101-3228] of the Budget Act of 2023, as amended by AB 102 (Chapter 38, Statutes of 2023).

Estimated amount of expenditures for administering agency administrative costs:

- CEC administrative costs are estimated to be 10 percent of the total budget.

If applicable, identify laws or regulations that govern how funds will be used:

- AB 209 (Chapter 251, Statutes of 2022) established the EBD Program and provides direction on how the funds will be allocated to recipients, including requirements for project eligibility and program implementation. All funds will be allocated and managed in accordance with this law.
- SB 306 (Chapter 387, Statutes of 2023) directs CEC to submit an annual report to the Legislature on the status of the EBD Direct Install Program.
- The CEC adopted the Equitable Building Decarbonization Direct Install Program Guidelines on October 18, 2023. The program guidelines provide further direction on program implementation in alignment with AB 209 (2022).
- AB 103 (Chapter 33, Statutes of 2023) directs which portion of GGRF funds shall be used for administrative costs (Support) and which portion shall be used for implementation (Local Assistance).
- AB 102 (Chapter 38, Statutes of 2023) directs which portion of GGRF funds shall be used for administrative costs (Support) and which portion shall be used for implementation (Local Assistance).

Continuation of existing Expenditure Record:

- This is a new program that does not have an existing expenditure record.

Project Types:

- Energy equity
- Building electrification/decarbonization retrofits, including electrification, energy efficiency, load management, and low-global warming potential refrigerants
- Extreme heat resiliency
- Climate adaptation and resiliency
- Water use efficiency

Describe the projects and/or measures that will be eligible for funding:

- Provide and install energy-efficient electric equipment and appliances, energy efficiency measures, load shifting measures, electric panel upgrades, building

envelope enhancements, and related upgrades and remediation directly to low-income households at minimal to no cost. New equipment will replace gas-fired equipment used in space heating, water heating, cooking, and/or clothes drying.

Intended recipients:

- The program is intended to benefit households in underresourced communities across California. Selected low-income households in underresourced communities will receive the installations at minimal to no cost.
- Per AB 209 (2022) underresourced community “has the same meaning as defined in Section 71130” of the Public Resources Code, which “means a community identified pursuant to Section 39711 of the Health and Safety Code, subdivision (d) of Section 39713 of the Health and Safety Code, or subdivision (g) of Section 75005.”
- Underresourced communities are within the parameters of the California Air Resources Board (CARB) defined Priority Populations. Underresourced communities are located in one of the following geographic areas:
 1. Communities identified in the SB 535 (Chapter 830, Statutes of 2012) Disadvantaged Communities map developed by the California Environmental Protection Agency,
 2. Census tracts with median household incomes at or below 80 percent of the statewide median income, or
 3. Census tracts with median household incomes at or below the threshold designated as low-income by the California Department of Housing and Community Development.

Program structure and process for selecting projects for funding:

- Regional administrators will be selected through a competitive funding opportunity to implement the EBD Direct Install Program in each of the three regions: Northern, Central, and Southern California.
- Businesses, local governments, and nonprofits may apply for the role of regional administrator.
- Proposals may be led by community-based organizations (CBO), include CBOs as subcontractors, or both. For this program, CBOs include nonprofit organizations, tribal, or governmental entities that have demonstrated effectiveness representing underresourced or tribal communities and providing support and services to individuals in those communities.
- Households receiving the minimal to no cost installations will be determined through analysis of utility bill data and targeting of communities and buildings.
- Regional administrators and CBOs will conduct outreach to building owners and tenants to offer program participation information.

Element (2) A description of how a proposed expenditure will further the regulatory purposes of Division 25.5 (commencing with Section 38500) of the Health and Safety Code, including, but not limited to, the limit established under Part 3 (commencing with Section 38550) and other applicable requirements of law.

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

- *The Cap and-Trade Auction Proceeds Fourth Investment Plan: Fiscal Years 2022-23 through 2024-25* recommends expanded building electrification efforts and the incorporation of heat pump technologies using low global warming potential (GWP) refrigerants to reduce high GWP hydrofluorocarbon gas emissions. The requirements of this expenditure include the use of zero emission building technology equipment. This program will fund the replacement of old, gas-burning (natural gas and propane) space heating equipment with new, efficient, electric heat pumps.
- *California's 2022 Climate Change Scoping Plan* identified key strategies and recommendations to continue reducing greenhouse gas (GHG) emissions and achieve the goals and purposes of AB 32 and related statutes. The building decarbonization retrofits funded by the EBD Program will continue to enhance energy efficiency and provide a reduction in the use of gas-fueled equipment in homes.

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

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

- Expenditures will achieve net GHG benefits by funding the replacement of gas-fueled equipment with efficient, electric heat pump space heating and cooling equipment, heat pump water heaters, electric cook tops, light-emitting diode (LED) lights, home remediation, building envelope improvements, weatherization, and other efficiency measures.
- GHG emission reductions and reduced criteria and toxic air pollutants will be achieved through the reduced consumption of natural gas, propane, and other non-electric fuel sources by funding the purchase of zero emission building technology equipment which emit less GHG emissions and air pollutants than comparable fossil fuel burning equipment.
- This program will facilitate GHG reductions and reduce criteria and toxic pollutants emissions through the installation of equipment to facilitate or allow automated load shifting to non-peak demand hours.

- This program will facilitate GHG reductions and reduce criteria and toxic pollutants emissions through the replacement of gas-fueled space heating and cooling equipment with efficient electric heat pumps utilizing low-GWP refrigerants.

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

- Decarbonization projects will reduce energy consumption and begin to yield GHG emission reductions starting in 2025. It is expected these systems will maintain GHG emission reductions for a period of 15 years based on the average life expectancy of the equipment and appliances. Co-benefits discussed in Element 4 will begin to be achieved in 2025 alongside the GHG emission reductions.

Element (4) A description of how the administering agency considered the applicability and feasibility of other non-greenhouse gas reduction objectives of Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

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

- Environmental co-benefits. The replacement of fuel-combustion equipment and appliances with efficient electric equipment and appliances will reduce the overall demand for fossil fuel gas and propane. This will reduce the need to construct new or expand existing utility scale production or storage facilities.
- Economic co-benefits. The projects will provide economic benefits for disadvantaged community residents through targeted recruitment and hiring of workers from local under-resourced communities.
- Public Health and Safety co-benefits. At a large scale, the installation of electric, energy efficient appliances in existing homes will improve overall air quality by reducing criteria pollutants and GHG emissions from energy production in California. Inside homes, replacing older gas-powered water heating and space heating systems with all-electric, energy efficient models will benefit public health by reducing exposure to indoor air pollutants, such as carbon monoxide, associated with very old or poorly maintained heating units. In addition, replacing gas cooking equipment with electric will reduce indoor pollutants and improve indoor air quality.
- Climate resiliency. Installation of efficient, electric heat pumps for cooling will provide air-conditioning to homes in underresourced communities, an ability for occupants to mitigate extreme heat, and improve general comfort. In addition, the installation of smart thermostats and flexible demand appliances will facilitate load shifting to non-peak times when renewable energy is plentiful, allow for load shed when the grid needs support, and support the 6-gigawatt (GW) demand response goal.

- The projects will also contribute to achieving the Governor’s 6 million heat pump installations by 2035 goal outlined in the letter from Governor Newsom to CARB in 2022.

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

- The EBD Program will direct public investment toward the most disadvantaged communities in California. The EBD Program is focused on retrofitting single-family, multifamily, and manufactured homes for low-income households and underresourced communities with efficient, electric heat pumps. CEC will analyze interval energy meter data to identify underresourced communities and homes for retrofits. Projects will be designed to achieve GHG emission reductions in participating households while improving air quality, resiliency to climate change, and grid reliability, where possible. Decarbonization and electrical remediation measures reduce toxic air pollutants and help modernize California’s energy infrastructure. This program provides an opportunity for small businesses, affordable housing associations, and other community institutions to participate in and benefit from statewide efforts to reduce GHG emissions by applying to be one of three regional administrators.

Percentage of total funding that will be expended for projects that are located in and benefit priority populations¹ per CARB guidance

- CEC plans to expend at least 90 percent of the total project funds received under the FY 22-23 and FY 23-24 appropriations to projects that provide benefits to disadvantaged or low-income communities or low-income households.
- We expect this amount to include 65 percent of total project funds for investments in and benefiting residents of disadvantaged communities, 20 percent in and benefiting residents of low-income communities or low-income households and 5 percent benefitting low-income households outside of, but within one half of one mile of a disadvantaged community.

Describe the benefits to priority populations per CARB guidance

- Projects will reduce GHG emissions from disadvantaged or low-income communities, and low-income households.
- Projects will improve indoor air quality and improve public health outcomes for residents of disadvantaged or low-income communities, and low-income households.
- Projects will improve the safety and comfort of homes through remediation, new efficient electric equipment, and building envelope improvements.

Explain strategies the administering agency will use to maximize benefits to disadvantaged communities

- All households served in this program must meet low-income requirements and be located in an underresourced community, as required by AB 209 (2022).

- Regional administrators will be required to partner with CBOs to identify homes and provide outreach and education to residents.
- Targeted recruitment and hiring of workers from local underresourced communities.

Explain how the administering agency will avoid potential substantial burdens to disadvantaged communities and low-income communities or, if unknown, explain the process for identifying and avoiding potential substantial burdens

- Equipment will be at no or minimal cost to low-income building owners and occupants.
- Regional administrators must collaborate with CBOs to conduct meaningful outreach, develop workforce plans and standards, and adhere to contractor preference requirements. CEC will evaluate and consider these measures in the competitive regional administrator selection process.
- The CEC has received feedback during the public guideline adoption process from low-income communities expressing concerns of resident displacement, through eviction or rent increases, because of home upgrades. The CEC plans to prepare program participation agreements for the regional administrators to use to implement tenant protections for program participants. These tenant protections may be revisited by the CEC based on feedback from regional administrators and participants and revised in a future edition of the program guidelines.
- The CEC and competitively selected regional administrators will consult directly with communities throughout program implementation to identify potential burdens and course correct. The agency will make programmatic adjustments as needed by modifying program guidelines through workshops and public comments opportunities to avoid potential substantial burdens to disadvantaged and low-income communities. Any amendments to program guidelines are brought before the CEC for adoption.
- CEC is collaborating with agencies to determine how to simplify administrative processes for the occupant and building owner.
- CEC is exploring how to leverage complimentary programs by layering or braiding programs elements to share costs or provide more resources to low-income occupants and building owners.

Element (5) A description of how the administering agency will document the result achieved from the expenditure to comply with Division 25.5 (commencing with Section 35800) of the Health and Safety Code.

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

- The CEC will establish program metrics to be tracked and reported to the CEC, CARB, and the Legislature. The CEC will also conduct program evaluation. The CEC will require regional administrators maintain records and submit status reports

regularly throughout the project term. In addition, the CEC will conduct periodic reviews of selected projects. If a regional administrator does not perform in accordance with program requirements, they will be subject to the remedies for non-performance, as identified in CEC's guidelines and solicitation or contract agreements.

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

- The CEC will calculate the GHG emission reductions and co-benefits expected and achieved from projects using a method and/or tool approved by CARB.
- The CEC will coordinate with CARB to estimate GHG emission reductions and co-benefits, using quantification methodologies approved by CARB.

Type of information that will be collected to document results, consistent with CARB guidance

- The CEC will collect data on project location, baseline and estimated energy usage, energy costs, energy fuel, type of upgrade installed, and other data, as applicable and as specified in CARB guidance.
- To determine the job benefits, the CEC will compile data from funding recipients on jobs provided, both the quality and quantity, consistent with CARB guidance.
- Once operational, the CEC will collect information on project outcomes for all projects, consistent with CARB guidance.

How the administering agency will report on program status

- CEC will report to CARB consistent with CARB guidance. The CEC will provide regular updates on the program, including expenditure amounts, GHG emission reductions, and other benefits, as applicable (e.g., jobs supported, dwellings retrofitted). Reports will also include information on project outcomes consistent with CARB guidance.