
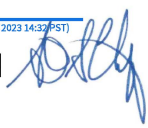


To: Greenhouse Gas Reduction Fund Program

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

Date: January 5, 2023

Subject: Greenhouse Gas Reduction Fund: California Air Resources Board (CARB)
Expenditure Record for Fiscal Year 2021-2022 Woodsmoke Reduction Program

This Attestation Memorandum documents that CARB completed the attached Expenditure Record on December 20, 2022, for the Woodsmoke Reduction 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 CARB for public posting on the CARB website at: www.arb.ca.gov/caclimateinvestments. Questions on this Attestation Memorandum or Expenditure Record may be directed to Ms. Kasia Turkiewicz, Air Resources Engineer, at (279) 208-7743 or by email at kasia.turkiewicz@arb.ca.gov.

Attachment

cc: Kasia Turkiewicz, Air Resources Engineer, California Air Resources Board

Greenhouse Gas Reduction Fund: Expenditure Record

California Air Resources Board
Woodsmoke Reduction Program

Authorizing legislation: Item 3900-102-3228 of the Budget Act of 2021, as amended by SB170 (Chapter 240, Statutes of 2021) appropriates to California Air Resources Board \$5,000,000 for the Woodsmoke Reduction Program.

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

Agency that will administer funding:

- California Air Resources Board (CARB) in partnership with the California Air Pollution Control Officers Association (CAPCOA) and local air pollution control districts or air quality management districts (District).

Amount of proposed expenditure and appropriation reference:

- The total expenditure is \$5 million, per Section 3900 102 3228 of the Budget Act of 2021 (Chapter 240, Statutes of 2021).

Estimated amount of expenditures for administering agency administrative costs

- Total administrative costs for CARB, CAPCOA, and Districts are estimated to be 15 percent of the total amount provided for the Woodsmoke Reduction Program (Program), with 5 percent for CARB's administrative costs and 10 percent for CAPCOA and Districts.

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

- AB 1532 (Pérez, Chapter 807, Statutes of 2012), Senate Bill (SB) 535 (de León, Chapter 830, Statutes of 2012), SB 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012), SB 862 (Budget and Fiscal Review Committee, Chapter 36, Statutes of 2014), and AB 1550 (Gomez, Chapter 369, Statutes of 2016) provide the general framework for how the auction proceeds will be administered to further the purposes of AB 32.
- The Budget Act of 2021, as amended by SB 170, appropriates funds and provides direction on funded programs.
- SB 563 (Lara, Chapter 671, Statutes of 2017) establishes the Woodsmoke Reduction Program and provides direction on project eligibility and program implementation.

Continuation of existing Expenditure Record

- This is an update to an existing Expenditure Record for Fiscal Years 2016-2017 and 2018-2019. The Expenditure Record elements being updated include the following: amount of proposed expenditure, appropriation reference, and type of projects eligible for funding.

Project Type(s)

- Woodsmoke reduction

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

- Wood stove change-out programs offering incentives towards the replacement of existing uncertified residential wood burning stoves, wood inserts, or fireplaces used for primary space heating with the following home heating devices:
 - Select clean-burning and energy-efficient wood stoves or inserts approved by CARB for this Woodsmoke Reduction Program;
 - Pellet stoves or inserts;
 - Electric heater stoves or inserts; or
 - Electric heat pumps.
- In the case of fireplaces, if the existing fireplace is structurally sound, the Woodsmoke Reduction Program may offer an incentive to be used towards purchase and installation of a fireplace insert. However, if the fireplace is lacking structural integrity, the incentive could be used towards the purchase of an eligible free-standing home heating device or an electric heat pump.
- Woodsmoke Reduction Program must demonstrate greenhouse gas (GHG) emission reductions resulting from the use of cleaner and more energy efficient heating devices.
- Any wood stove or wood insert removed through this Woodsmoke Reduction Program must be rendered permanently inoperable and scrapped at a recycling facility, if recycling is available in the area. If a fireplace was used as a primary source of heat prior to the change-out, the fireplace and chimney must be rendered permanently inoperable after a new eligible device is installed. If the replacement device is an electric heat pump, the household may be allowed to retain the original heating device to be used only during power outages.
- Eligible project costs include the cost of the new device and installation, including any parts, materials, or labor required for energy-efficient and safe installation, compliance with all State and local laws and regulations pertaining to installation of home heating devices, and the disposal of the high-polluting stove.
- The incentive amount for each change-out will be established by CAPCOA or the District but it may not exceed \$10,000 for an electric heat pump or \$5,000 for any other replacement device for Enhanced Incentive and \$5,000 for an electric heat pump or \$2,500 for any other replacement device for a Standard Incentive.

- The replacement device must be installed by an appropriately licensed installer participating in the Woodsmoke Reduction Program and meet all State and local fire and building codes.

Intended recipients

- The Woodsmoke Reduction Program, administered by CARB, will be implemented by CAPCOA, in coordination with the Districts. CAPCOA will determine how much funding to award to each participating District for the Woodsmoke Reduction Program.
- California residents using an uncertified wood stove, wood insert, or fireplace as a primary heat source in Districts awarded GGRF funds are eligible for this Woodsmoke Reduction Program.
- Low-income households and households located in disadvantaged and low-income communities or on tribal lands will qualify for higher incentives, up to the full cost of purchase and installation of new heating device and disposal of the old stove or insert.
- All other households will be eligible for a partial cost incentive to be determined by CAPCOA or the District.

Program structure and process for selecting projects for funding

- CAPCOA will select Districts to advertise and implement wood burning device replacement projects focusing on maximizing benefits to priority populations.¹
- Districts will establish their own processes for distributing funds considering the overall Woodsmoke Reduction Program goal of directing funds to low-income households and households in disadvantaged communities.
- CAPCOA or individual Districts will formally recruit and select certified retailers and contractors.

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

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

- AB 1532 (Chapter 807, Statutes of 2012) requires that monies from the GGRF fund be appropriated in a manner that is consistent with the three-year Investment Plan. The “Cap and-Trade Auction Proceeds Fourth Investment Plan: Fiscal Years 2022-23 through 2024-25” recommends support for energy efficiency and renewable energy projects for residential, commercial, industrial, and public buildings. In addition, the Investment Plan specifically describes and recommends the types of projects that will be funded by expenditures under the Woodsmoke Reduction Program to improve energy efficiency and decarbonize buildings. Therefore, the expenditures covered by this record are consistent with the Investment Plan and align with the priorities expressed in the Investment Plan.
- California’s 2017 Climate Change Scoping² Plan identified key strategies and recommendations to continue reducing GHG emissions and achieve the goals and purposes of AB 32 and related statutes. As California’s energy sector is associated with about half of the State’s near-term GHG emissions, efforts to reduce energy related emissions are a key component of the Scoping Plan. Recommended actions related to the energy sector in the Scoping Plan include promotion of energy efficiency. The expenditures included in this record foster energy efficiency through the replacement of existing uncertified, inefficient wood stoves, wood inserts, and fireplaces with certified, high-efficiency units with a corresponding reduction in GHG emissions.

² https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf

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

- Switching from an uncertified wood stove, wood insert, or fireplace to a U.S. EPA certified wood stove, wood insert, pellet stove, or pellet insert reduces the GHG emissions due to cleaner and more efficient burning.
 - Cleaner-burning stoves emit less methane.
 - Due to the increased efficiency, certified stoves typically burn 20 percent less wood to produce the same amount of heat as the uncertified stove.
 - Reducing the amount of wood burned by 20 percent reduces the GHG emissions by approximately the same amount.
- Switching from an uncertified wood stove, wood insert, or fireplace to electric heat results in a net reduction of GHG emissions

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

- It is anticipated that wood stove replacement projects funded using the Fiscal Year 2021-2022 appropriation will reduce GHG emissions starting in 2023. The lifetime of a new wood stove or wood insert is estimated at 20 years. The lifetime of an electric heater stove or insert is estimated at 13 years. The lifetime of an electric heat pump is estimated at 15 years.
- With proper maintenance, the replacement devices will reduce GHG emissions for their entire lifespan.
- Proper maintenance is especially critical for certified wood stoves and wood inserts to maximize efficiency and minimize pollution.

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

- The most significant co-benefit of wood stove replacement projects is a reduction of up to 80 percent of fine particulate (PM2.5) emissions for each stove replaced with a certified stove and almost 100 percent reduction for each stove replaced with electric home heating device.
- Black carbon and air toxics emissions (including formaldehyde, benzene, and polycyclic organic matter) are also reduced along with PM2.5 emissions.
- Reductions in PM2.5, black carbon, and toxic air contaminants will reduce the impacts of climate change as well as improve both indoor and outdoor air quality. In some parts of the State, the PM2.5 reduction co benefit could have a significant impact on an area's ability to attain air quality standards.
- Reductions in particle pollution will have significant short and long-term health benefits. Short-term exposures to particles can aggravate lung disease, causing asthma attacks and acute bronchitis, and may also increase susceptibility to respiratory infections. Long-term exposures have been associated with reduced lung function and the development of chronic bronchitis and even premature death.
- Consumers who will continue to use wood as fuel for home heating should be able to save approximately 20 percent of their annual fuel cost through the use of professionally installed, certified, high efficiency wood stoves or wood inserts.
- Professional installers will remove old stoves, which often pose a serious fire risk, and ensure that newly installed home heating devices meet local fire and building codes and that residents have functional and reliable smoke and carbon monoxide detectors, thereby increasing public safety.
- Reductions in particulate matter will improve ambient air visibility.
- The change-out projects will support the local economy and job creation by increasing demand for, and installation of, certified wood stoves and other clean home heating
- New home heating devices may increase the market value of a home.

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

- Improves health of California residents by reducing pollution linked to short and long-term health issues such as asthma attacks, reduced lung function, and increased risk for cardiovascular disease.
- Complements the State's effort to improve air quality by helping the areas throughout the State to achieve and/or maintain attainment of air quality standards.
- Directs public and private investment toward the most disadvantaged communities in California by providing incentives for the replacement of old, inefficient wood burning devices.

Percentage of total funding that will be expended for projects that are located in and benefit priority populations³ per CARB guidance

- The administering agency has established a target to expend at least 75 percent of the total project funds received under this fiscal year appropriation to fund projects that provide benefits to disadvantaged or low-income communities or low-income households.
- The Investment Targets do not include a minimum target for Woodsmoke Reduction Program funds to benefit disadvantaged communities, but some projects may still benefit disadvantaged communities.

Describe the benefits to priority populations per CARB guidance

- Change-outs will result in air quality improvements such as reductions in criteria and toxic air contaminants from reduced wood burning in low-income communities, low-income households, and possibly disadvantaged communities.
- The Woodstove Reduction Program may also result in employment and/or job training for priority populations.
- Priority populations will be eligible for a higher incentive amount, up to the full cost of the purchase and installation of new home heating device and disposal of the old wood stove or wood insert.
- To maximize benefits, the Woodstove Reduction Program will focus outreach in disadvantaged and low-income communities.

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

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

- Households in disadvantaged communities will qualify for higher incentives (Enhanced Incentives), up to the full cost of purchase and installation of new heating device and disposal of the old stove or insert.
- Districts will establish their own processes for distributing funds considering the overall Woodstove Reduction Program goal of directing funds to households in disadvantaged communities (along with other priority populations). Districts are encouraged to explore different options. Examples of two possible scenarios include:
 - Conducting a District-wide solicitation during which all applications would be collected and reviewed, and priority would be given to those Applicants qualifying for Enhanced Incentives.
 - Implementing the Project in two phases. During the first phase, only applications from low-income households and households in disadvantaged and low-income communities would be accepted. During the second phase, the Project would be open to all applicants.

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

- Participation in the Woodstove Reduction Program is voluntary.
- In case of rental properties, both owner and tenant must agree to participate in the Woodstove Reduction Program. To qualify for an incentive, the owner must agree to not raise the rent of the unit for a period of two years or evict the unit's residents because of increased value of the unit due solely to the newly installed home heating devices.

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

- Through its grant agreements, CARB will require the funding recipient (CAPCOA) and its partners (Districts) to maintain records and submit regular status reports.
- These reports will include the information required per reporting templates available on the CARB website.⁴
- CARB will review the reports for compliance with Woodstove Reduction Program goals and requirements.
- If a funding recipient does not perform in accordance with Woodstove Reduction Program requirements, the recipient will be subject to the remedies for non-performance.
- If Woodstove Reduction Program goals are not being met, CARB will collaborate with CAPCOA to implement Woodstove Reduction Program adjustments as necessary to ensure that all Greenhouse Gas Reduction Fund (GGRF)/California Climate Investments requirements.

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

- Net GHG reductions from wood stove, wood insert, or fireplace replacement will be calculated using the CARB approved GHG Quantification Methodology for Fiscal Year 2021-2022 available at: www.arb.ca.gov/cci-quantification.

⁴ <https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials>

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

- Program tracking number for each change-out
- Location of each change-out
- Criteria for determining if project benefits a disadvantaged community, low-income community, or low-income household
- Type of wood burning device being replaced (stove, insert, or fireplace)
- Quantity of wood burned annually before replacement
- Replacement device type, make, and model
- Replacement device emission rates and efficiency (if available)
- Estimates of GHG, black carbon, and PM2.5 emission reductions
- Installation date
- Copy of final permit (City, County, or State)
- Incentive amount and, if applicable, verification that Applicant qualifies for an Enhanced Incentive based on the location of the property in a disadvantaged or low-income census tract or on tribal lands or Applicant's household income
- Criteria for determining if project benefits a disadvantaged community, low-income community, or low-income household
- Verification of destruction of uncertified stove or fireplace and chimney being rendered permanently inoperable
- Verification that the resident was trained on device operation and maintenance and, if applicable, following best practices in wood storage and wood burning for residential space heating
- GGRF dollars spent
- Total project cost
- Information on jobs and job training opportunities created and whether employees are residents of disadvantaged communities, low-income communities, or low-income households.

How the administering agency will report on program status

- CARB will provide regular updates on the Woodstove Reduction Program, including expenditure amounts, GHG emission reductions, and other benefits, as applicable (e.g., stoves changed out) consistent with reporting templates available on the CARB website.⁵

⁵ <https://ww2.arb.ca.gov/resources/documents/ci-quantification-benefits-and-reporting-materials>