

**CIDCO** air pollution control district SANTA BARBARA COUNTY

Agenda Item: H-2 Agenda Date: January 16, 2025 Agenda Placement: Regular Estimated Time: 15 Minutes Continued Item: No

## **Board Agenda Item**

TO: Air Pollution Control District Board

Aeron Arlin Genet, Air Pollution Control Officer FROM:

CONTACT: Emily Waddington, Air Quality Specialist, (805) 979-8334

SUBJECT: Update on the District's Heat Clean Program

#### **RECOMMENDATION:**

Receive and file an update on the District's Heat Clean Program.

#### **BACKGROUND:**

The Heat Clean Program (Program), formerly known as the Woodsmoke Reduction Program, helps households voluntarily replace an uncertified wood-burning stove, fireplace insert, or fireplace used as a primary source of heat with a cleaner and more efficient electric heater. The Program mitigates neighborhood impacts and reduces emissions of criteria air pollutants, toxic air contaminants, and greenhouse gases by reducing the amount of woodsmoke emitted from fireplaces and wood stoves throughout Santa Barbara County.

The Program is designed to maximize benefits to low-income households, households located in disadvantaged or low-income communities, and households located on tribal land, with a goal of distributing 75% of the currently available total funding amount of \$445,004 to these priority populations. The Program is operated by the District in accordance with the California Air Resources Board (CARB)'s Woodsmoke Reduction Program Guidelines.<sup>1</sup> The funds to support the Program come from California Climate Investments, a statewide program that puts Cap-and-Trade dollars to work improving public health, particularly in low-income and disadvantaged communities. More information on the District's Program is available at www.ourair.org/heatclean/.

Aeron Arlin Genet, Air Pollution Control Officer

<sup>&</sup>lt;sup>1</sup> https://ww2.arb.ca.gov/sites/default/files/2023-11/2021-2022 2022-2023amended wrp final guidelines.pdf

With your Board's approval, the District has implemented three cycles of the Woodsmoke Reduction Program starting with a locally funded pilot program approved in March 2017 with Resolution 17-04. The first CARB-funded program was approved in June 2018 with Resolution 18-10. The District implemented the third iteration of the program, which was also CARB funded, and approved in October 2019 with Resolution 19-16. Most recently, in June 2023 with Resolution 23-05, your Board approved participation in CARB's Woodsmoke Reduction Program Fiscal Year 2021-2022 Appropriation and the acceptance of \$213,104. In November 2023, CARB amended the Fiscal Year 2021-2022 Appropriation to allocate an additional \$239,900 to the District. In January 2024, your Board approved this additional allocation from CARB, increasing the total grant amount to \$445,004 for this fourth cycle of the Program.

To date, the Program has completed 133 change-out projects, with 87 (i.e., 90% of funding) going to change-outs located in low-income communities or low-income households. A majority of the participants (62%) were located in north county (Santa Maria, Guadalupe, and Lompoc), with 36% of participants in south county (Santa Barbara, Carpinteria, and Goleta) and 2% in mid-county (Los Alamos and Santa Ynez). To date the District has expended \$470,562 on the Program overall with a cost effectiveness of \$3,787 per ton of particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ) reduced and \$1,992 per ton of ozone precursors (reactive organic compounds and oxides of nitrogen) reduced.

Program	Years Operated	Low-Income Projects Completed	Total Projects Completed	\$ Expended for Low-Income Projects	Total \$ Expended
Cycle 1 (Pilot)	2017-2018	-	32	-	\$31,500
Cycle 2	2018-2019	43	55	\$213,000	\$225,000
Cycle 3	2019-2021	44	46	\$212,062	\$214,062
Total	2017-2021	87	133	\$425,062	\$470,562

Table 1.	<b>Summary</b>	of Past	Programs
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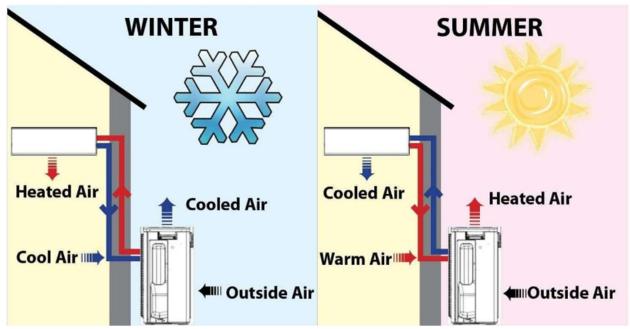
#### **DISCUSSION**:

Woodsmoke emitted from fireplaces and wood stoves accounts for approximately 30 percent of wintertime PM<sub>2.5</sub> emissions in the county. Woodsmoke also emits ozone precursors, greenhouse gases, black carbon, and other toxic air contaminants. Every year, the District receives complaints about neighborhood impacts due to wood-burning stoves and fireplaces. By providing an alternative to wood-burning heaters in the county, the Program provides valuable health benefits to community members and improves air quality, especially in low-income and disadvantaged neighborhoods that have been disproportionally impacted by the effects of air pollution. The Program has successfully achieved an expenditure rate of 90% of funds going to projects located in low-income households or communities, which exceeds the target set by CARB of 75% of funding.

CARB released amended Woodsmoke Reduction Program Guidelines on November 17, 2023. The Guidelines focus on the replacement of wood stoves and fireplaces with electric heaters, such as electric air-source heat pumps and electric fireplace inserts. Based on CARB's Guidelines, natural gas stoves and fireplace inserts are no longer eligible replacement heaters.

For participants that choose a heat pump as their replacement option, the Program allows them to use their existing wood-burning heater in the case of a power outage, otherwise the existing wood-burning heater must be rendered permanently inoperable.

Heat pumps have many advantages in that they operate very efficiently, are easy to maintain, and provide both heating and cooling; however, they often have a higher upfront cost than traditional heaters to purchase and install. The cost of a heat pump purchase and installation can vary depending on factors such as the household's size, current heating configuration, and electrical system. Costs can range from approximately \$3,500 to \$35,000 compared to approximately \$5,000 for a typical electric fireplace insert. The Program's Enhanced Incentive of \$10,000 is designed to cover the full cost of a heat pump purchase and installation for a typical project. Instead of generating heat, heat pumps transfer heat that already exists in the air, allowing them to use as little as one quarter of the energy of a traditional heater. There are many incentive programs focused on heat pump installation, including federal incentives through the Home Electrification and Appliance Rebates (HEERA) Program, state incentives through TECH Clean California, and local incentives offered through the Tri-County Regional Energy Network (3C-REN), Central Coast Community Energy (3CE), and the City of Lompoc. Theoretically, an income-qualified applicant that meets the requirements of all the programs could receive a maximum incentive of up to \$30,000 for their project. The District plans to work with heat pump installers that are certified with these other programs so that participants can stack funds to maximize available incentives.



**Figure 1. How Heat Pumps Work:** A heat pump contains a liquid refrigerant and condensing coil that absorbs heat from the outside air, even in very cold temperatures, and fans the hot air into the house. To cool, the process is reversed as warm air is removed from the home.

Households located on tribal lands or in a disadvantaged or low-income census tract as identified by state guidelines<sup>2</sup>, are eligible for the Enhanced Voucher. Participants may also qualify for this higher voucher amount based upon their household income or if they document participation in a federal or state low-income assistance program. The Enhanced Voucher provides up to \$10,000 for eligible costs towards replacement with an electric heat pump and up to \$5,000 for eligible costs towards replacement with an electric fireplace insert. Participants who do not qualify for the Enhanced Voucher may qualify for a Standard Voucher. The Standard Voucher provides up to \$5,000 for eligible costs towards replacement with an electric fireplace insert. CARB may increase the maximum amount allowed for Enhanced Vouchers in 2025 after completing a public comment process; if this modification is approved, the District would also increase its maximum incentive amounts for new Enhanced Voucher applications. The voucher is applied towards the purchase of the new heating device and installation costs. Funds must be liquidated by June 30, 2027.

Replacement Heater	Standard Voucher	Enhanced Voucher
Air-Source Heat Pump	\$5,000	\$10,000
Electric Fireplace Insert	\$2,500	\$5,000

#### **Table 2. Maximum APCD Incentive Amounts**

The replacement heater must be purchased and installed by a participating installer who has signed an agreement with the District. Participating installers are appropriately licensed according to the CARB Guidelines and ensure that the new heater meets local building permit requirements. The District contracted with two fireplace maintenance businesses to implement past cycles of the Program. New agreements with heating, ventilation, and air conditioning (HVAC) businesses with the ability to install heat pumps will be needed to implement this Program. So far, District staff have contacted 14 HVAC businesses throughout the county with licenses that meet the Program requirements and that may install heat pumps. HVAC installer outreach is ongoing. The District will hold trainings for participating installers prior to the Program launch, which is anticipated in February 2025.

The Program will be advertised to Santa Barbara County residents with a focus on low-income and disadvantaged communities, and tribal lands. Initial outreach ideas include a news release with countywide media coverage through newspapers, online media, and social media, as well as collaboration with participating installers and other local heat pump programs on outreach materials, outreach to local tribal organizations, and outreach at community events. Program materials will be translated to Spanish and will also include an educational component to increase awareness of the air quality impacts from woodsmoke and the benefits of using alternatives to wood-burning heaters.

<sup>&</sup>lt;sup>2</sup> <u>California Climate Investments Priority Populations 2024:</u>

https://gis.carb.arb.ca.gov/portal/apps/experiencebuilder/experience/?id=e746df40e39144029cd1f9fd748c81b2

#### FISCAL IMPACT:

This fourth cycle of the Heat Clean Program is funded with \$445,004 from CARB that your Board previously approved. Of these funds, \$402,118 is designated for project funds and the remaining \$42,886 is designated for District administration of the Program. The Heat Clean Program funds are included in the District's budget for Fiscal Year 2024-25.

Additional CARB funding may also be made available in future years. The California Air Pollution Control Officer's Association (CAPCOA) has identified the Woodsmoke Reduction Program as a funding priority for the state budget in the 2024-24 Fiscal Year, requesting \$20 million statewide to support local air district programs in the upcoming year.

#### **ATTACHMENT:**

A. Santa Barbara County Air Pollution Control District's Heat Clean Program, Cycle 4 Work Plan.

## ATTACHMENT A

Heat Clean Program, Cycle 4 Work Plan

January 16, 2025

Santa Barbara County Air Pollution Control District Board of Directors

> 260 San Antonio Road, Suite A Santa Barbara, California 93110

# Santa Barbara County Air Pollution Control District's Heat Clean Program

CYCLE 4 WORK PLAN JANUARY, 2024



"HEAT CLEAN. SAVE GREEN!"



air pollution control district SANTA BARBARA COUNTY



## **Table of Contents**

I. Progra	am Background	2		
II. Overv	<i>v</i> iew	2		
III. Proje	ect Eligibility	3		
A	. Existing Wood-Burning Heater	3		
В	. Replacement Heater	3		
IV. Appl	ication Process	4		
V. Vouc	her	4		
A	. Enhanced Incentive Voucher	4		
В	. Standard Voucher	5		
С	Eligible costs	5		
VI. Outr	each	6		
VII. Rep	orting	6		
VIII. Wo	rkflow	7		
IX. Timeline				

## I. Program Background

Cycle 3 of the Woodsmoke Reduction Program (Program) is designed to help households replace an uncertified wood stove, wood insert, or fireplace used as a primary source of heat with a cleaner burning and more efficient heater. The Program is part of California Climate Investments, a statewide program that puts cap-and-trade dollars to work to reduce greenhouse gas (GHG) emissions, strengthen the economy, and improve public health and the environment particularly in low-income and disadvantaged communities.

The Santa Barbara County Air Pollution Control District (District) administers Program change-out projects located in Santa Barbara County. This Work Plan outlines how the District administers the Program locally in order to meet the goals and requirements of the Woodsmoke Reduction Program Guidelines Fiscal Year 2021-2022 and 2022-2023 Appropriation (Guidelines) developed by the California Air Resources Board (CARB).

#### **II. Overview**

The Program offers incentives toward the voluntary replacement of existing residential uncertified wood-burning heaters (stoves, inserts, or fireplaces) used as a primary heat source with a zero-emission heater. Natural gas-fueled heaters (including gas fireplace inserts) are no longer eligible as replacement heaters. Instead, the current Program focuses on replacing existing heaters with electric units such as an electric air-source heat pump or an electric fireplace insert.

Some households may qualify for a higher incentive amount (referred to throughout this document as an "Enhanced Incentive Voucher"), dependent on the applicant being located on tribal lands, in a disadvantaged or low-income census tract as identified by state guidelines, the applicant's participation in a federal or state low-income assistance program, or the applicant's household income. The Enhanced Incentive Voucher provides up to a maximum of \$10,000 towards replacement with an electric air-source heat pump and up to \$5,000 towards replacement with an electric fireplace insert. Applicants who do not qualify for the Enhanced Incentive Voucher." The Standard Voucher provides up to a maximum of \$5,000 towards replacement with an electric fireplace insert. Property renters may also qualify for either the Enhanced Incentive Voucher or the Standard Voucher with the formal approval of the property owner.

The replacement heater must be purchased and installed through a participating installer who has signed an agreement with the District. Participating installers are appropriately licensed according to the CARB Guidelines and ensure that the new heater meets local building permit requirements. Applicants who choose replacement with a heat pump may keep their original heater to use only in case of an emergency during a power outage. The Program includes outreach and educational components to both inform residents about the benefits of switching to cleaner burning home heaters and train them on the proper operation and maintenance of the new heater to maximize efficiency.

### **III. Project Eligibility**

#### A. Existing Wood-Burning Heater

To be eligible for Program funds, an applicant must rely on an existing wood-burning stove, insert, or fireplace that is uncertified by the EPA, operational, and used as a primary source of heat in the residence.

In order to determine if an existing wood stove or insert qualifies for the program, the applicant may do the following:

- Determine when the stove or insert was installed. Stoves and inserts installed prior to 1988 do not comply with emission standards and therefore qualify for this Program.
- Check the stove or insert model against the EPA current and historical list of certified wood heaters.<sup>1</sup> If the stove's manufacturer and model is not on the current and historical lists, the stove is considered uncertified and qualifies for the Program.
- Check the back of the stove for a certification label. Stoves that do not have any label describing particulate matter emission standards will qualify for this Program. Wood stoves certified by the U.S. EPA to comply with the particulate emission standards are not eligible for this Program. These stoves will have a label permanently affixed to them stating that the stove is certified to comply with the 1988, 1990, 2015, or 2020 EPA standards.

Wood-burning fireplaces are eligible for the Program as long as they are operable and used as a primary heat source for the household. The applicant certifies the eligibility of their current wood stove, insert, or fireplace and provides photos as part of the application process. The application is reviewed by the District to determine the eligibility of the existing heater.

This Program provides an incentive for one replacement per household. Applicants who own multiple residential rental units may receive a total amount of no more than \$30,000 for all replacement projects combined. Households who have completed a change-out under this Program in the past are not eligible for another voucher. Retroactive rebates are not available under this Program so applicants who remove the existing heater or purchase a new replacement heater prior to receiving a voucher are disqualified. If the new heater is a heat pump, the old heater can remain only for emergency use in case of a power outage. If the new heater is not a heat pump, the original heater must be rendered permanently inoperable and recycled (if applicable) before payment can be issued to the installer.

#### **B. Replacement Heater**

Applicants may select one of the following replacement options:

- Electric air-source heat pump; or
- Electric fireplace insert

Natural gas-fueled heaters (including gas fireplace inserts) are no longer eligible.

<sup>&</sup>lt;sup>1</sup> www.epa.gov/compliance/epa-certified-wood-heater-database

Portable home heating devices not permanently affixed to the home structure are not eligible replacement options. The replacement heater must be installed by a professional, appropriately licensed installer participating in this Program or their licensed subcontractor. Only installers who have a signed agreement with the District will be eligible to participate in the Program. Installers must undergo training with the District and hold the appropriate insurance as specified in the agreement between CARB and the District. A list of participating installers is provided to the participants. Self-installation of heating devices is not allowed.

The installation must adhere to all applicable local and state building codes. Any building permits, comparable permits for the applicable jurisdiction, or other required approvals shall be obtained per local or state ordinances and shall be the responsibility of the installer or the applicant. Projects that are located within a mobile or manufactured home must obtain the required permit through The California Department of Housing and Community Development. The applicant must also agree to receive training in device operation and maintenance.

## **IV. Application Process**

Applications are processed on a first-come, first-served basis. If an application is incomplete, the District may request additional information from the applicant to complete the application. The District notifies applicants if their project is ineligible or if funding is no longer available. Once funds are fully distributed, the District maintains a list of interested community members in the case that future funding becomes available. If funding is available and the existing and replacement heater meet the eligibility requirements, the District issues the participant a voucher.

If the change-out is taking place in a rental unit, both the property owner and the renter must sign the Owner/Tenant Agreement as part of the application process.

## V. Voucher

#### A. Enhanced Incentive Voucher

Applicants that are eligible for the Enhanced Incentive Voucher receive up to a maximum of **\$10,000** for replacement with an electric heat pump and up to **\$5,000** for an electric fireplace insert. The Program goal is to direct at least 75% of funds towards Enhanced Incentive Vouchers.

Whether homeowners or renters, applicants are eligible for the Enhanced Incentive Voucher if their residence is located on tribal lands, or in an area of Santa Barbara County designated as a low-income or a disadvantaged community by the State.<sup>2</sup> Applicants outside these areas may qualify for the Enhanced Incentive Voucher if they demonstrate their income eligibility by choosing one of the following two options:

<sup>&</sup>lt;sup>2</sup> According to the Priority Populations Investments map at <u>https://webmaps.arb.ca.gov/PriorityPopulations/</u>

1. They may submit proof of participation in one of the following federal and state lowincome assistance programs:

- U.S. Department of Agriculture Women, Infants and Children (WIC) Program;
- U.S. Department of Health and Human Services Low Income Energy Assistance Program (LIHEAP); OR
- California Alternate Rates for Energy (CARE) Program with any utility company.

2. The applicant may provide tax documentation or pay stubs showing that the adjusted gross income of their household in 2023 did not exceed the County-specific California Department of Housing and Community Development low-income limits<sup>3</sup> based on household size:

Income Limits Based on Household Size						
# Persons in Household	1	2	3	4	5	6
Income Limits	\$91,200	\$104,250	\$117,300	\$130,350	\$140,800	\$151,250

#### B. Standard Voucher

All other applicants that are not eligible for the Enhanced Incentive Voucher may qualify for a Standard Voucher up to a maximum of **\$5,000** towards replacement with an electric heat pump and up to **\$2,500** for an electric fireplace insert. The table below summarizes the maximum incentive amounts for the Standard and Enhanced Voucher.

Maximum Incentive Amounts				
Replacement Heater	Standard Voucher	Enhanced Voucher		
Air-Source Heat Pump	\$5,000	\$10,000		
Electric Fireplace Insert	\$2,500	\$5,000		

#### C. Eligible Costs

All eligible costs must be supported by appropriate documentation. Eligible project costs include:

- the new heating device (basic model), including sales tax;
- installation costs, including any parts, materials, permits, or labor required for the safe and legal installation of the heater; and
- cost of disposal of the old stove or insert or cost of rendering the old fireplace inoperable (if applicable).

The installer is required to provide an estimate for the installation of a basic model that is safe and efficient. Any cost that is not directly related to the change-out, including cost of remodeling work beyond what is required to complete the change-out, is not eligible. Any remodeling work and upgrades above a basic model is paid for by the participant. The participant is also responsible for paying for project work if the total amount exceeds the approved voucher incentive amount.

<sup>&</sup>lt;sup>3</sup> Available at <u>https://www.hcd.ca.gov/sites/default/files/docs/grants-and-funding/income-limits-2024.pdf</u>

Incentives offered by other programs can be combined with funds from this Program to reduce household's out-of-pocket costs provided the sum of all incentives do not exceed the actual cost of the change-out project and the change-out conforms to all Program requirements.

## VI. Outreach

The Program is advertised to Santa Barbara County residents with a focus on tribal lands, and low-income and disadvantaged communities. Initial outreach ideas include:

- Collaboration with other local program's offering incentives for heat pumps (Tri-County Regional Energy Network, Central Coast Community Energy, Santa Barbara Clean Energy)
- News release with Spanish translation with full distribution:
  - Countywide media coverage
    - Local Newspapers
    - Online media (Noozhawk, Edhat)
    - TV News (KEYT, KSBY)
    - Radio (K-Lite, Spanish-language stations)
    - Social media (Twitter, Instagram, Nextdoor)
    - Send to Board members
    - Send to CAC members
- One-page flyers to participating installers, planning/building jurisdictions, and District inspectors
- Email to outreach list that District has been maintaining of interested parties
- Outreach at community events such as Earth Day, Open Streets, and other events
- Outreach to the Santa Ynez Band of Chumash Indians and other local tribal organizations

Outreach materials will be translated to Spanish and will also include an educational component to increase awareness about the impacts of woodsmoke and the benefits to using alternatives to wood-burning heaters.

## VII. Reporting

The District is responsible for recordkeeping and reporting to CARB. All reports must be consistent with the quantification methodologies and reporting guidance developed by CARB and the requirements established in the Guidelines. Districts are responsible for collecting, maintaining, and reporting to CARB the following information for each change-out:

- Tracking number for each change-out;
- Location of change-out;
- Incentive amount and, if applicable, verification that the applicant qualifies for an Enhanced Incentive Voucher based on the location of the property in a disadvantaged, low-income, or tribal census tract or the applicant's household income;
- Documents proving the change-out benefits a disadvantaged or low-income community, or a low-income household, and description of how the change-out meets a community need;
- Type of wood-burning device being replaced (stove, insert, or fireplace);
- Replacement device type, make, and model;

- Estimate of the quantity of wood burned annually before replacement;
- Replacement device emission rates and efficiency (if available);
- Installation date;
- Copy of final permit (City, County, or State);
- Photographic evidence of change-out completion, including "before" and "after" photos showing the devices in relation to the room where they were/are installed;
- Verification of destruction of uncertified stove (including recycling if available locally) or, where applicable, verification of rendering fireplace and chimney permanently inoperable, unless replacement device is an electric heat pump and the recipient keeps the original heater to use only in case of electricity loss;
- 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 heating;
- Greenhouse Gas Reduction Fund (GGRF) dollars spent; and
- Information on jobs and training opportunities created and whether employees are residents of disadvantaged or low-income communities or low-income households.

Documentation of each change-out project must include all the parameters above, which are necessary for quantifying project reductions. Recordkeeping and tracking will be retained by the District for three years after the "Project Closeout" report is submitted.

#### **VIII. Workflow**

The following workflow is used to expend funds in a timely manner and to track information required by CARB:

- 1. Prior to Program launch, the District trains participating installers and they sign the Installer Agreement. The District conducts outreach to notify the public about the Program.
- 2. An applicant completes and submits the voucher application. Applications are available through the District office, the District website (<u>www.OurAir.org/heatclean/</u>), and through participating installers.
- 3. District staff reviews the application for completeness. If the application is incomplete, staff requests the additional information required. Once an application is complete staff determines the applicant's eligibility for the Program including whether they are eligible for the Enhanced Incentive Voucher or Standard Voucher.
- 4. Vouchers are issued in the order received, with an expiration date of 120 days from issuance.
- 5. The participant works with their participating installer to complete the change-out project (including obtaining all required permits). Vouchers are accepted by participating installers at the time of sale and applied as a discount.

- 6. Installers provide training to the applicant to ensure the new heater is properly operated and maintained to maximize energy efficiency and achieve the lowest possible emission rates. The Acknowledgement of Training Certification on the Voucher is signed to document the training requirement.
- 7. When required, the old device is delivered to the recycler by the installer. The installer completes the Recycler Certification Form.
- 8. Installers submit required documentation to the District once the change-out is complete and before the voucher expiration date. The voucher expiration may be extended at the discretion of the District with good cause. The District will pay out the participating installer within 30 days. Required documentation includes:
  - Signed voucher;
  - Copy of building permit;
  - Post installation photos;
  - Copy of in-home estimate;
  - Copy of final invoice to participant;
  - Invoice to the District; and
  - Recycler Certification Form (if applicable).
- 9. The District submits the required documentation and reports to CARB and retains all necessary Program information.

#### IX. Timeline

Milestone	Date
Grant Agreement G21-WSRP-21 executed with CARB	June 12, 2023
Grant Agreement Amendment G21-WSRP-21-1 executed with CARB	December 21, 2023
Installer Agreements fully executed (signed by Counsel, Risk, Auditor, installers and APCO)	Fall, 2024
APCD Board Meeting agenda item	January 16, 2025
Program launch target	February, 2025
Reporting to CARB	Ongoing
All program funds liquidated	June 30, 2027