

BOARD MEETING DATE: November 7, 2025

AGENDA NO. 26

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a hybrid meeting on Friday, October 17, 2025. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Veronica Padilla-Campos,
Acting Committee Chair
Technology Committee

AK:psc

Call to Order

Acting Committee Chair Veronica Padilla-Campos called the meeting to order at 12:00 p.m.

Roll Call

Committee Members

Present: Supervisor Curt Hagman
Mayor Patricia Lock Dawson
Supervisor Janet Nguyen
Board Member Veronica Padilla-Campos

Absent: Mayor Pro Tem Carlos Rodriguez, Committee Chair
Mayor Pro Tem Larry McCallon

For additional details of the Technology Committee Meeting, please refer to the [Webcast](#).

ACTION ITEMS:

1. Approve School Bus Awards and Execute Contracts for Lower-Emission School Bus, CARE4Kids, and Carl Moyer Programs

Yuh Jiun Tan, Program Supervisor, Technology Advancement Office, presented on the U.S. EPA 2024 Clean Heavy-Duty Vehicles Grant to fund projects under the CARE4Kids program to replace combustion school buses with zero-emission buses. In February 2025, Program Announcement #PA2025-02 was released to solicit applications for the replacement of combustion school buses with zero-emission buses under the Lower-Emission School Bus and CARE4Kids programs. The solicitation closed in April 2025, and 33 school districts from all four counties of the South Coast Air Basin applied. Subsequently, in March 2025, a Program Announcement #PA2025-03 was released to solicit applications for “Year 27” of the Carl Moyer Program and closed in July 2025. Two school districts submitted applications under the Carl Moyer Program, requesting to replace a total of 54 combustion school buses with zero-emission buses. Both solicitations were oversubscribed, and funds from other programs were reallocated to help support the projects. These actions are to authorize the Executive Officer to: 1) execute and amend contracts to replace school buses and install infrastructure under the Lower Emission School Bus, CARE4Kids, and the Carl Moyer Programs for a total amount not to exceed \$78,187,054 comprised of \$34,570,116 from the Carl Moyer Program AB 923 Special Revenue Fund (80), \$22,180,000 from the CARE4Kids Program Advanced Technology, Outreach and Education Fund (17), \$3,510,006 from CARB SEP Special Revenue Fund (87), and \$17,926,932 from the Community Air Protection AB 134 Fund (77); 2) redistribute the source of funds as needed from SB 1107, SB 129, State Reserve, and associated interest funds in Fund (32), Carl Moyer AB 923 Fund (80), CARE4Kids Program Advanced Technology, Outreach and Education Fund (17), CARB SEP Special Revenue Fund (87), and the Community Air Protection AB 134 Fund (77) to ensure program liquidation targets are met; and 3) reassign projects between funding years, as needed, in order to expeditiously meet program funding liquidation requirements. For additional details, please refer to the [Webcast](#) beginning at 4:42.

Supervisor Hagman inquired about the availability of the zero-emission school bus technology. Aaron Katzenstein, Deputy Executive Officer, Technology Advancement Office explained that the technology is already commercialized and is readily available. For additional details, please refer to the [Webcast](#) beginning at 8:15.

Board Member Padilla-Campos asked whether chargers are included in the award and how many would be provided. Ms. Tan clarified that each award includes up to \$20,000 in funding for supporting infrastructure. For additional details, please refer to the [Webcast](#) beginning at 9:00.

Moved by Hagman; seconded by Lock Dawson; unanimously approved.

Ayes: Hagman, Lock Dawson, Nguyen, Padilla-Campos

Noes: None

Abstain: None

Absent: McCallon, Rodriguez

2. Execute Contract to Develop and Demonstrate Zero-Emission Fuel Cell Electric Heavy-Duty Refuse Truck

Sam Cao, Program Supervisor, Technology Advancement Office, presented on CARB's Advanced Clean Fleet regulation that requires State and Local Government Agency Fleets to transition to zero-emission technologies for medium- and heavy-duty trucks, including refuse trucks. Although there are some options for battery-electric refuse trucks, development and demonstration are needed for fuel cell electric refuse trucks to accommodate longer range of operation and faster refueling. This action is to authorize the Executive Officer to execute a contract with Symbio North America Corporation in an amount not to exceed \$800,000 to develop and demonstrate a Class 8 heavy-duty fuel cell electric refuse truck. For additional details, please refer to the [Webcast](#) beginning at 10:50.

Mayor Lock Dawson commented that she does not have a financial interest but is required to identify for the record that she is the Mayor of the City of Riverside, which is involved in this item.

Mayor Lock Dawson commented on the on-going issues with hydrogen fuel supply, as well as the financial issues with the ARCHES program, and asked how we will ensure fueling for the hydrogen projects. Dr. Katzenstein responded that there are ongoing issues with hydrogen supply and the need to reduce the price of hydrogen. South Coast AQMD is trying to fund multiple projects in both supply and production to ensure there is a more stable supply of hydrogen. For additional details, please refer to the [Webcast](#) beginning at 14:26.

Supervisor Hagman asked whether there is a local or state rule mandating 100% green hydrogen production and commented on the price and benefits of hydrogen. For additional details, please refer to the [Webcast](#) beginning at 17:16.

Moved by Hagman; seconded by Lock Dawson; unanimously approved.

Ayes: Hagman, Lock Dawson, Nguyen, Padilla-Campos

Noes: None

Abstain: None

Absent: McCallon, Rodriguez

INFORMATIONAL ITEM:

3. Clean Fuels Program Draft 2026 Plan Update

Vasileios Papapostolou, Planning & Rules Manager, Technology Advancement Office, presented on the Clean Fuels Plan Update. Staff provides the Clean Fuels Program Draft Plan Update to the Technology Committee to solicit input on the proposed priority technology areas and potential projects for the upcoming year before requesting final Board approval for the Plan Update in early spring. Staff proposes continued support for a wide portfolio of technologies emphasizing zero-emission technologies for vehicles, off-road equipment, emission and fuel characterization studies, and supporting infrastructure. For additional details, please refer to the [Webcast](#) beginning at 15:26.

Mayor Patricia Lock Dawson asked if there were any linear generators in South Coast AQMD's jurisdiction. Dr. Katzenstein stated that Prologis has a site within South Coast AQMD's jurisdiction being used to charge battery electric class 8 trucks. Dr. Katzenstein also stated that there were several backup generation units along with prime generation units to support stationary refrigeration units, such as at grocery stores. For additional details, please refer to the [Webcast](#) beginning at 26:17.

4. Presentation on CHARGE-OPT: Data-Driven Planning Platform for Truck Charging Networks and Truck Battery Electric Fleets

Jonathan Shi, AmpTrans Inc, presented on the design and development of a planning tool to assist fleet owners, charging infrastructure developers, and other key stakeholders in deploying medium- and heavy-duty battery electric trucks and charging infrastructure. For additional details, please refer to the [Webcast](#) beginning at 30:44.

Mayor Patricia Lock Dawson commented that the CHARGE-OPT project is a good example for the problem-solution approach and that she recalled a study on the gap for charging infrastructure. Dr. Katzenstein commented that Mr. Shi works with Professor Nanpeng Yu, University of California, Riverside on the CHARGE-OPT project, which is funded by the South Coast AQMD Clean Fuels Program Fund. Dr. Katzenstein suggested a future live demonstration of CHARGE-OPT, if there is interest from the Technology Committee members. For additional details, please refer to the [Webcast](#) beginning at 38:10.

Board Member Veronica Padilla-Campos asked whether CHARGE-OPT is live yet and how often the data is updated. Mr. Shi responded that the truck and infrastructure modules are live and free for users in the South Coast AQMD jurisdiction. Mr. Shi further explained that the data used is within the last year and that the project team is adding a new layer on the charging station module that shows utility service areas. For additional details, please refer to the [Webcast](#) beginning at 40:04.

OTHER MATTERS:

5. Other Business

There was no other business to report.

6. Public Comment Period

No public comment.

7. Next Meeting Date

The next regular Technology Committee meeting is scheduled for Friday, November 21, 2025, at noon.

Adjournment

The meeting adjourned at 12:40 p.m.

Attachment

Attendance Record

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TECHNOLOGY COMMITTEE MEETING Attendance Record – October 17, 2025

Supervisor Curt Hagman	South Coast AQMD Board Member
Mayor Patricia Lock Dawson	South Coast AQMD Board Member
Supervisor Janet Nguyen	South Coast AQMD Board Member
Board Member Padilla-Campos	South Coast AQMD Board Member
Debra Mendelsohn	Board Consultant/Assistant (McCallon/Rodriguez)
Andrew Silva	Board Consultant/Assistant (Lock Dawson)
Kiera Dixon	Public Member
Amanda Maki	Public Member
Jonathan Shi	AmpTrans Inc
Nanpeng Yu	UC Riverside
Debra Ashby	South Coast AQMD Staff
Barbara Baird	South Coast AQMD Staff
Cathy Bartels	South Coast AQMD Staff
Cindy Bustillos	South Coast AQMD Staff
Sam Cao	South Coast AQMD Staff
Penny Shaw Cedillo	South Coast AQMD Staff
Scott Gallegos	South Coast AQMD Staff
Juan Garcia	South Coast AQMD Staff
Bayron Gilchrist	South Coast AQMD Staff
Carlos Gonzalez	South Coast AQMD Staff
Dé Groeneveld	South Coast AQMD Staff
Alex Han	South Coast AQMD Staff
Aaron Katzenstein	South Coast AQMD Staff
Brandee Keith	South Coast AQMD Staff
Angela Kim	South Coast AQMD Staff
Howard Lee	South Coast AQMD Staff
Tom Lee	South Coast AQMD Staff
Hay Lo	South Coast AQMD Staff
Paul Macias	South Coast AQMD Staff
Ghislain Muberwa	South Coast AQMD Staff
Susan Nakamura	South Coast AQMD Staff
Wayne Nastri	South Coast AQMD Staff
Vasileios Papapostolou	South Coast AQMD Staff
Robert Paud	South Coast AQMD Staff
Cynthia Ravenstein	South Coast AQMD Staff
Sarah Rees	South Coast AQMD Staff
Yuh Jiun Tan	South Coast AQMD Staff

Lisa TankaSouth Coast AQMD Staff
Alejandra Vega South Coast AQMD Staff
Kristina Voorhees South Coast AQMD Staff
Fan VuSouth Coast AQMD Staff
Mei WangSouth Coast AQMD Staff