

Community Air Protection Incentives, and by extension, the material included in this Project Plan, is part of California Climate Investments, which uses billions of Cap-and-Invest dollars to fund projects that reduce harmful emissions, protect public health, strengthen local economies, and support natural environments. With a strong focus on communities most impacted by pollution and limited access to resources, California Climate Investments helps build a more equitable and sustainable future.

Los Incentivos de Protección del Aire Comunitario, y por extensión, el material incluido en este Plan de Proyecto, forma parte de las Inversiones Climáticas de California, que utilizan miles de millones de dólares de Cap-and-Invest para financiar proyectos que reducen las emisiones nocivas, protegen la salud pública, fortalecen las economías locales y apoyan los ambientes naturales. Con un fuerte enfoque en las comunidades más afectadas por la contaminación y con acceso limitado a los recursos, las Inversiones Climáticas de California contribuyen a construir un futuro más equitativo y sostenible.

1 Project Identification

1.1 Background

In 2020 and 2021, the San Diego Portside Environmental Justice Community ("Portside" or "Community") developed a Community Emissions Reduction Program (CERP) to address disproportionate air pollution burden in Barrio Logan, West National City, Logan Heights, and Sherman Heights at a local level as part of the state-wide AB 617 Community Air Protection Program (CAPP). The CERP was a collaborative effort by the San Diego County Air Pollution Control District (SDAPCD) and the Portside Community Steering Committee (CSC). As part of the CERP development, various strategies to reduce emissions in and around the community were developed and vetted. These strategies were included in the final CERP that was approved by the California Air Resources Board (CARB) in October 2021.

This document serves as the Project Plan for the Zero-Emission Cargo Handling Equipment Pilot Project (CHE Pilot). It was drafted according to the guidelines laid out in the Community Air Protection Program Incentives 2025 Guidelines. It describes the nature of the strategy, its history of support by the Community, requirements for entities desiring to participate and receive project funding, how these projects will benefit the community through improved air quality or exposure reduction, as well as other key aspects.

1.2 Project Description

The CHE Pilot, consistent with Action G1 of the CERP, aims to replace diesel emitting CHE with zero-emission (ZE) CHE at the San Diego Unified Port District's (Port) marine terminals to reach the goal of reducing cargo handling equipment diesel particulate matter (DPM) emissions by 80% and oxides of nitrogen (NOx) emissions by 89%. This project plan outlines how SDAPCD, in partnership with the Port, will create and implement an incentive program to offset the costs of ZE CHE for interested partners with cargo handling operations in the Port's jurisdiction.

1.3 Benefits

The main benefits of the CHE Pilot include reductions in DPM, NOx, and greenhouse gas emissions by replacing operations using diesel-powered equipment with operations using ZE equipment. SDAPCD also anticipates that the CHE Pilot will provide guidance for businesses unfamiliar with ZE equipment and opportunities to observe ZE CHE in real-world applications, showing how it can be incorporated into business operations. Additionally, the CHE Pilot supports State of California Executive Order N-27-25 in its stated goal of accelerating deployment of ZE technologies.

2 Community Support

2.1 Background – Community Steering Committee

In 2018, SDAPCD assembled the CSC to work in partnership with SDAPCD on all aspects of the AB 617 program in Portside. This advisory committee is tasked with guidance, communication, and feedback on various aspects of the AB 617 program implementation, including the CERP. The CSC currently consists of 23 primary members and 10 alternate members representing local community residents, community groups, environmental justice organizations, businesses, labor, public agency staff, the Port and the United States Navy. Since 2018, the CSC has met regularly to discuss air quality issues and items that support the implementation of the CERP. These meetings provide an opportunity for the CSC and the public to share information about monitoring, incentives, enforcement, planning, and other actions that impact air quality in the Community.

2.2 Specific Support for the ZE CHE Pilot Project

During the CERP development process, CSC members participated in over a dozen meetings and recommended the following strategies to reduce emissions from CHE (Portside CSC CERP- G1):

- Facilitate upgrading and/or replacing diesel-emitting CHE with ZE CHE at the Port's marine terminals. Port staff will encourage the use of ZE technology and will help assess the feasibility of ZE equipment when existing equipment is scheduled to be upgraded. If electric cargo handling equipment is not feasible, Port staff shall demonstrate the legal, technological, operational, and/or financial constraints to ZE equipment implementation.

- Ensure new CHE is compatible with the operational needs of end users.
- Ensure CHE has been vetted by end user.
- Port staff will establish ZE / near-ZE goals for 2030 in the Port's Maritime Clean Air Strategy (MCAS), which was adopted in 2021.
- Port staff will develop recommendations for the best available CHE technology in the MCAS

The proposed CHE Pilot can support the advancement of these strategies. The CERP was adopted by a unanimous vote of the CSC on June 15, 2021. ZE equipment used at the Port has been prioritized by Portside CSC members as one of the top three projects to use incentive funding, along with air filters in schools and homes and the ZE truck pilot project (CSC survey 9/21/21).

On August 4, 2025, SDAPCD and Port executed a Memorandum of Understanding (MOU), which included several commitments, referred to as "schedules" in the MOU itself. Schedule #1 "aims to transition diesel-powered CHE to zero-emission CHE in support of the MCAS and the CERP".

At the meeting on March 24, 2026, the CSC was briefed on the basic elements of this proposed CHE Pilot. This project plan draft was distributed in English and Spanish to CSC members on July 7, 2026, with instructions to review the document and prepare for a vote in the next CSC meeting on whether to approve that SDAPCD submit the project plan to CARB and move forward with the CHE Pilot.

At the CSC meeting on July 28, 2026, the committee voted in support of the draft framework with an initial funding level of $3 million. There were sixteen yes votes, zero no votes, and zero abstentions.

2.3 Outreach

For the initial round of funding, SDAPCD will work closely with the Port to leverage their existing outreach to CHE owners and operators at the Port and to alert potential participants to the availability of CHE Pilot funding. This outreach is specifically targeted at owners/operators who have operations within the Portside Communities, where there are known, consistent operations that fit the criteria noted in Action G1 of the CERP. Existing outreach efforts have included surveys, direct email, phone outreach to eligible entities, and meetings. Depending on program demand, outreach can be expanded, or CHE Pilot funds may be shifted to the Zero-Emission Truck Pilot Project, if truck funding demand outpaces CHE funding demand.

3 Participant Requirements

3.1 Participant Requirements

CHE Pilot incentive funding may be awarded to CHE owners or operators who operate off-road, diesel-fueled CHE on or around the Port's Marine Related Industrial, Marine Terminal, and

Maritime Services and Industrial land uses within the Portside Communities boundaries, shown on the map in Figure 1 at the end of this document. The contract life for the program will be a minimum three years. Additional applicant requirements include:

- For the replacement of existing diesel-fueled equipment, the applicant must provide documentation of existing equipment usage at the Port sufficient to calculate emission reductions from transitioning to zero-emission equipment, including but not limited to:
    - Type of equipment
    - Engine model year
    - Usage data, such as fuel use or hours of operation
    - Location of existing operations
- For applicants who wish to expand their operations through the purchase of new CHE and are willing to choose new zero-emission equipment instead of diesel-powered equipment:
    - The applicant must provide quotes for cost comparison between the two options. Funding will be capped at the difference between cleanest available new diesel equipment and ZE equipment. Additional funding may be provided for charging infrastructure; see section 7.1 below for more details.
    - Emission reductions and cost-effectiveness will be calculated based on the difference between cleanest available new diesel equipment and ZE equipment.
- Applicant must commit to using the zero-emission equipment for operations within or around the Portside Communities for a contracted minimum hour usage during the pilot project duration
- Applicant must confirm availability of charging/fueling infrastructure sufficient to operate zero-emission equipment funded through the pilot project duration
- Applicant must provide written proof of zero-emission engine or powertrain certification or verification via CARB or EPA executive order.
- Applicant must provide to SDAPCD data on operation of zero-emission equipment, including hours of operation and location of equipment operations over contract life.
- Applicant must make equipment available for inspection by SDAPCD and/or CARB staff
- Successful applicants must participate in a minimum of three outreach events to educate and encourage others on the use of zero-emission equipment. These events can include but are not limited to: zero-emission showcases, ride-and-drives, and use-case demonstrations
- Applicant must certify compliance with all air quality regulations and best practices for operator employment and subcontracting.
- In the first round of funding, scrappage is not required. However, in later funding rounds as the program matures, the program may implement a scrappage requirement.

Preferential funding may be considered for applicants who commit to scrappage or removing diesel equipment from the State of California.

3.2 Application Process

SDAPCD anticipates the program will select projects for funding based on metrics such as cost effectiveness, disposition of existing equipment, and community support. SDAPCD will advertise fund availability through local dealerships, the CSC, the Port, and other interested parties at the start of the solicitation. SDAPCD will provide instructions to access and submit applications on the SDAPCD website and include a due date by which applications must be submitted. Applicants will submit applications during a project solicitation period determined by SDAPCD. Applications must include the required information as described in this Project Plan. As SDAPCD collects applications from interested entities, projects will be reviewed to determine eligibility, emission reductions, cost effectiveness, and other parameters. This may involve SDAPCD requesting additional information from applicants or visiting potential project sites. When the application review process is complete, SDAPCD will inform applicants if they have been selected and provide details on the project award amount and next steps. The CSC will be informed of the project participants via updates at the regularly scheduled CSC meetings and postings on the SDAPCD website.

4 Emission Reductions and Quantification Methodology

Greenhouse gas and pollutant (i.e., particulate matter [PM], reactive organic gases [ROG], and nitrogen oxides [NOx]) emissions reductions will be calculated based on the number of hours operated by the baseline and zero-emission replacement equipment using the emission factors and methodology for equipment outlined in the Carl Moyer Memorial Air Quality Standards Attainment Program (Moyer Program). Calculations will be performed and tracked using the Off-Road Non-Ag Calculator, an excel spreadsheet provided by CARB for project evaluations. SDAPCD will quantify emission reductions surplus to all local, State, and federal regulations. For projects that do not scrap and keep existing equipment as a back-up (more information below), emission reductions will be calculated based on the maximum allowed usage of the existing back-up equipment.

5 Relative Exposure Reductions

The CHE Pilot will result in exposure reductions to employees, residents, and visitors to the Portside community by reducing emissions from diesel CHE operations in the area. Exposure to PM, NOx, and ozone can have health impacts, and reducing those exposures can provide health benefits to the community.

6 Qualitative Benefits

In addition to criteria pollutant and greenhouse gas emission reductions, the CHE Pilot will also provide qualitative benefits such as:

- Reduced exposure to criteria pollutants to equipment operators using the zero-emission CHE or other people working around that equipment
- Potential fuel cost and maintenance cost savings with zero-emission equipment
- Knowledge sharing among businesses to test work cases for zero-emission equipment
- Upgrading CHE to improve Port operations

7 Funding and Equipment

7.1 Funding Amounts

The maximum percentage of eligible costs covered by funding from the CHE Pilot will depend on the disposition of the existing equipment that is to be replaced. Eligible costs are detailed in section 7.3 below.

Existing Equipment Disposition	**Maximum Funding Percentage**
Scrap/dismantle	80%
Remove from California	70%
Keep existing equipment as back-up	50%
Fleet Expansion	Case-by-case

If the CHE Pilot solicitation is oversubscribed, SDAPCD may impose funding caps on equipment that reduce grant amounts below the percentages listed above so that a higher number of projects can receive funding. Additional funding may be awarded for electric charging infrastructure on a case-by-case basis, which will be capped at $30,000 per charger installed.

Scrap/Dismantle

The existing equipment must be dismantled to make it inoperable, thereby guaranteeing emission reductions. Because emission reductions are rendered permanent through scrappage, projects that commit to scrappage can receive up to 80% of eligible costs. Retrofit or repower projects that convert existing equipment to zero-emission will fall under the scrap/dismantle category as long as the baseline, diesel-powered equipment is dismantled.

Remove from California

For operators that also have operations outside of California, SDAPCD will allow equipment to be relocated outside of the state and replaced by ZE CHE at the Port of San Diego. These projects still guarantee emission reductions for the Portside Community and can receive up to 70% of eligible costs.

Keep Existing Equipment as Back-up

Retaining the existing equipment as back-up in the event of downtime for the funded ZE CHE is allowed and can receive up to 50% of eligible costs. Operators who keep their equipment as back-up must commit to an annual hour limit for usage of existing equipment, which will be calculated as an average over the entire project life to accommodate unforeseen outages or mechanical issues. Both existing and new equipment must have functional hour meters to track usage, which must be reported in annual status reports. Hour limits will be specified in legally executed contracts, which shall include language authorizing SDAPCD or CARB to verify compliance with hour limits through audits or inspections of equipment. These projects will be ranked by emissions reductions and cost-effectiveness calculated from the minimum number of hours of usage reduced by the project, i.e. annual hour limit subtracted from total annual historical usage.

Fleet Expansion

For operators who are considering procuring new equipment to be used at the Port of San Diego, the CHE Pilot may provide funding on a case-by-case basis. Funding amount, emission reductions, and cost-effectiveness will all be calculated based on the gap between purchasing the cleanest available new diesel equipment versus new ZE equipment.

7.2 Eligible Equipment

The following types of equipment are eligible for funding:

- Yard trucks/hostlers
- Wheel loaders
- Rubber tired gantry cranes
- Straddle carriers
- Reach stackers
- Top/side picks
- Forklifts

Additional equipment will be considered with justification provided by the applicant, which must include a description of the diesel-powered operations and equipment that will be replaced or reduced by the funded equipment.

7.3 Eligible Costs and Co-funding

Eligible costs will include equipment, materials, and labor (for retrofit projects only) necessary for replacing business functions of existing equipment currently providing service at the specified location(s). Taxes, warranty, insurance, and transport fees may be considered eligible costs if determined by SDAPCD to be an incremental cost incurred by the purchase and operation of ZE equipment.

The CHE Pilot project encourages co-funding within the limits of the various funding sources. The applicant must provide SDAPCD with information on any other public funding to be used on the project. Determination of co-funding eligibility will be made on a case-by-case basis.

8 Project Selection

Applications received by SDAPCD will be reviewed by SDAPCD staff to determine cost effectiveness, contribution to CERP goals and CSC feedback below, and specific requirements of the CHE Pilot. Resources are allocated based on the available unencumbered incentive funding with feedback from the CSC. If the CHE pilot is oversubscribed, SDAPCD may impose funding maximums on projects, and each project will be ranked based on criteria informed by the goals of the CERP, including:

Goal 1: By 2031, reduce Diesel PM from 2018 levels by 80% in ambient air at all Portside Community Locations

and CSC feedback, such as:

- Reducing amount of PM and NOx emissions directly in the Portside community
- cost effectiveness of those reductions
- workforce development benefits
- project readiness
- community involvement

Projects that are awarded funding through the CHE Pilot will be communicated to the CSC as part of recurring Participatory Budgeting presentations, through which SDAPCD updates the CSC on how CAPP Incentive Funds are being spent, and the CSC advises SDAPCD on community priorities.

9 Reporting Requirements

All projects that receive funding under this program must comply with the requirements described in Chapter 3, Section W, of the CAPP Incentives 2025 Guidelines. This will enable the preparation of Yearly reports, which SDAPCD will prepare based on information collected from project participants. The information for these reports includes, but is not limited to, the following:

CAPP Incentives reporting requirements for Yearly Reports:

- Report the required project information in the CARL Database
- Report program-level information in the CAPP Incentives Supplemental Document for CERP projects funded with CAPP incentives
- Output generated by the Required Reports utility of CARL Database
- Contract execution and liquidation status for each grant year of CAPP incentives

- A list of any projects identified as nonperforming and a brief narrative of any related enforcement actions

Participants must ensure that project-related information is complete, correct, supported by documentation, and supplied to SDAPCD at a minimum annually and upon request for the preparation of reports. SDAPCD staff will clearly communicate to participants what documentation is required. Participants who violate or fail to meet program requirements may be required to return funds prorated to the duration that program requirements have not been met. Meanwhile, SDAPCD must acknowledge that the most up-to-date reporting requirements have been received and incorporated and must commit to maintaining documents in support of the reports in SDAPCD's system of record. Finally, this documentation must be made available to CARB staff upon request.

The above is not an exhaustive list of reporting requirements for participants in this program. Please refer to the CAPP Incentives 2025 Guidelines for a complete list.

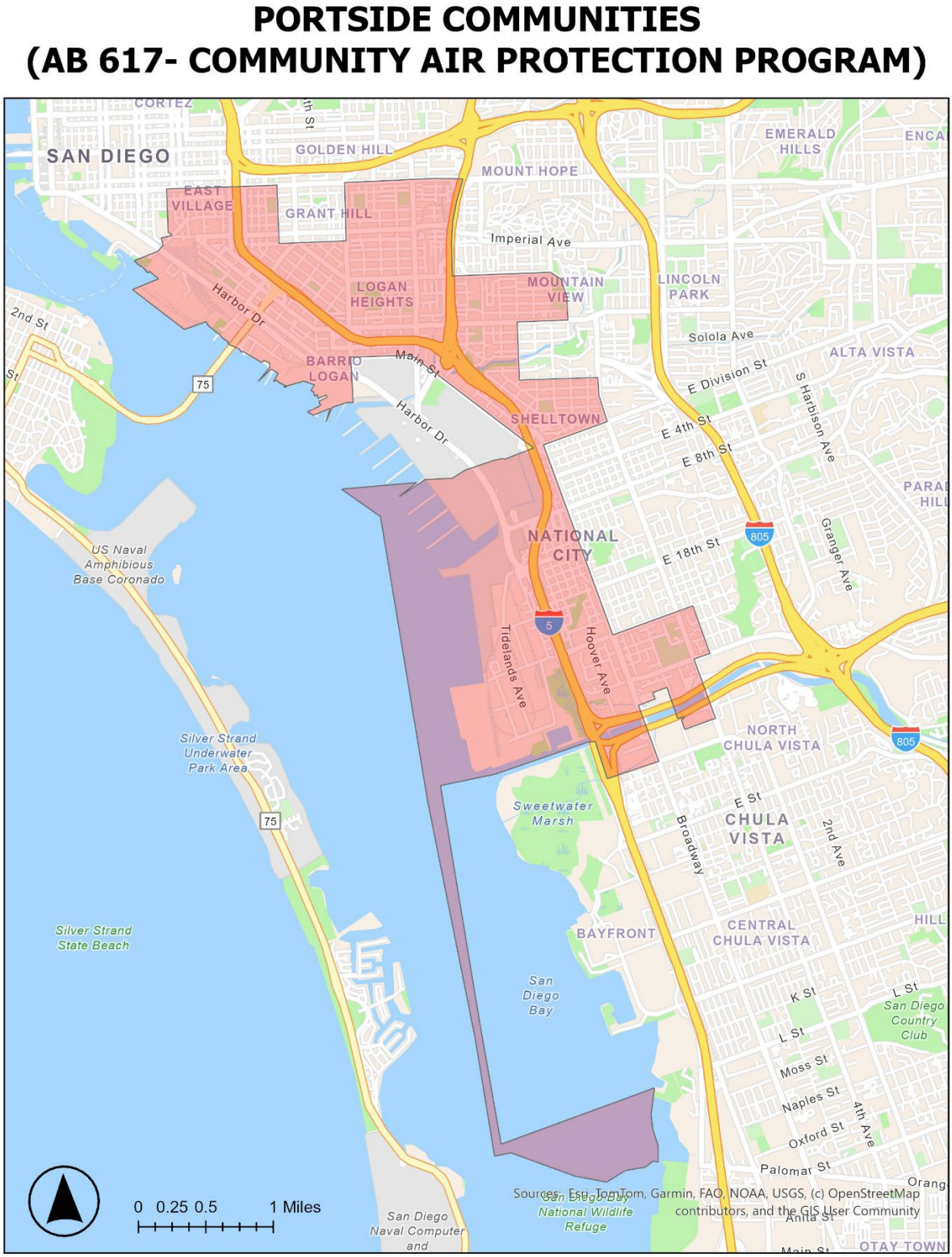


Figure 1 Map showing the boundary of the San Diego Portside Environmental Justice Community