



# INVEST CLEAN Workshop

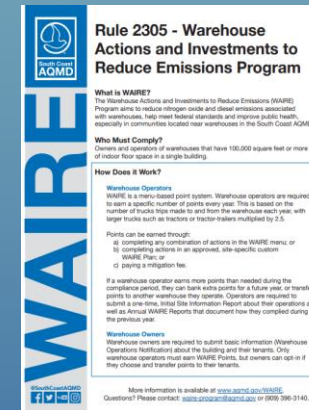
MAY 22, 2025

# Workshop Overview

## Today's Goals:

- Provide updates on INVEST CLEAN programs
  - Locomotive RFP
  - Other Program Announcements under the INVEST CLEAN
  - Implementation Timeline
- Updates on Warehouse Actions and Investments to Reduce Emission Program (WAIRE) funding
- Solicit feedback on the development and implementation of the program announcements and request for proposals

2



**CLIMATE  
POLLUTION  
REDUCTION  
GRANTS**  
U.S. Environmental Protection Agency



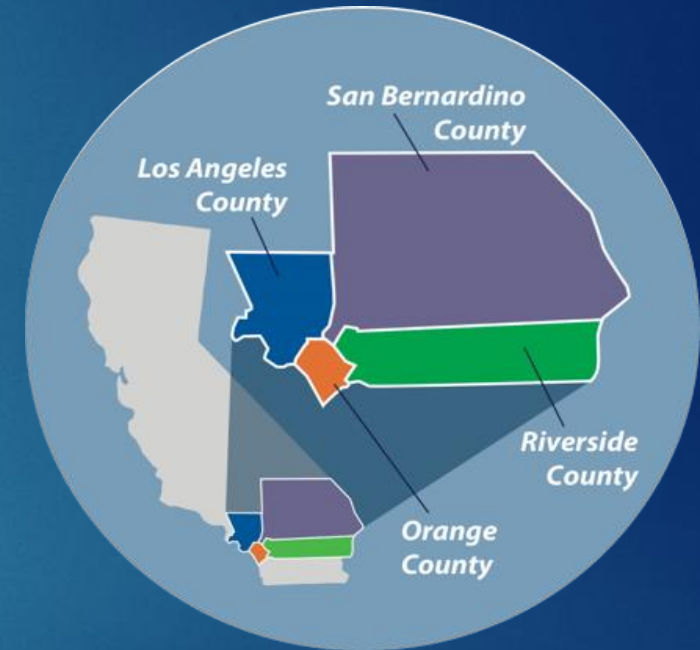


# Overview: Infrastructure, Vehicles, and Equipment Strategy for Climate, Equity, Air Quality, and National Competitiveness (INVEST CLEAN)

- Competitive Grant awarded under the Inflation Reduction Act (IRA)
- Awarded ~\$500 Million for INVEST CLEAN in October 2024

## Program's Purpose/Goals:

- Modernization of SoCal Goods movement and logistics network
- Reduce air pollution and provide air quality benefits to the region
- Support jobs
- Leverage funding, maximize emission reductions



Partnered with two Metropolitan Statistical Areas (MSAs):  
Los Angeles-Long Beach-Anaheim and Riverside-San Bernardino-Ontario

# South Coast AQMD's INVEST CLEAN

4

- Implementation of 4 incentive measures:
  1. Measure 1 - Charging infrastructure
  2. Measure 2 - Battery Electric (BE) freight vehicles
  3. Measure 3 - BE cargo handling equipment
  4. Measure 4 - BE locomotives and Supporting Infrastructure
- Workforce Training: partnership with International Brotherhood of Electrical Workers (IBEW) and National Electrical Contractors Association (NECA)
- Community Benefits: third-party facilitators to create community steering committee(s) and develop the community benefit plan
- National Renewable Energy Laboratory : provide third -party oversight to validate the program performance
- INVEST CLEAN webpage:  
<https://www.aqmd.gov/home/technology/implementation/invest-clean>



# INVEST CLEAN - Four Incentive Measures Support Goods Movement

5



Heavy-Duty  
Charging  
Infrastructure  
*Measure 1*

\$178.5 Million\*



Heavy-Duty  
Trucks and Last  
Mile Freight for  
Class 4 & 5  
Vehicles

*Measure 2*  
\$78 Million\*



Cargo Handling  
Equipment  
*Measure 3*

\$20.6 Million\*



Battery Electric  
Switcher  
Locomotive  
*Measure 4*

\$190.8 Million\*

\*Up to amounts



# Battery Electric Switcher Locomotive Program (Measure 4)

- ▶ Pending Board Approval – Start accepting applications on June 6, 2025
- ▶ Eligible Applicants
  - ▶ Manufacturer partnered with a rail operator
  - ▶ Locomotive Switcher owners and/or operators
- ▶ Parallel path for locomotive and infrastructure build
- ▶ Flexible staggered deployment and scrappage opportunities of existing diesel locomotives
- ▶ Minimum usage requirement



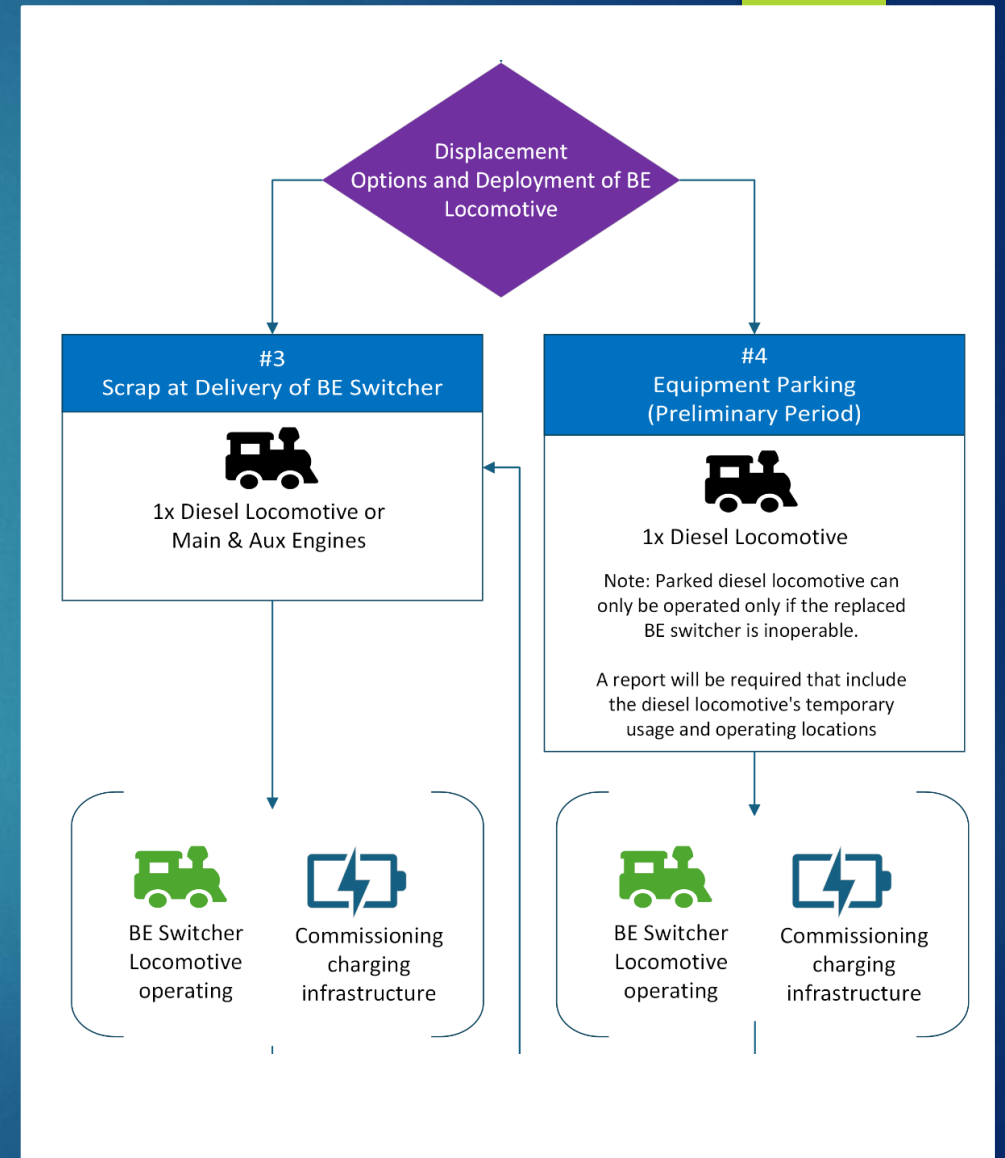
# Battery Electric Locomotive Program

7

## Two Displacement Options

Implement BE Switcher locomotive and infrastructure prior to scrappage of existing locomotive

- ▶ Allows time to fix deficiencies on the BE switcher locomotive
- ▶ Allows for proper workforce training with IBEW



# Measure 4: Battery Electric Switcher Locomotive Program

8

Incentives for Battery Electric Switcher Locomotives and supporting infrastructure

## TIMELINE

| ITEM  | DATE                          |
|---|-------------------------------|
| BE Switcher Locomotive RFP Issued               | June 6, 2025                  |
| BE Switcher Locomotive RFP Submission Deadline* | September 30, 2025 at 12 PM*  |
| BE Switcher Locomotive Proposal Evaluation      | October through December 2025 |
| Subaward Agreement Execution                    | Starting October 2025         |

\*If necessary, the RFP will be re-issued



# Measures 1 through 3

9

## Tentative Proposal Timeline

Measure 1 - Charging infrastructure

Measure 2.1 - Battery Electric (BE) freight vehicles

Measure 3 - BE cargo handling equipment

| Item                           | Date   |
|--------------------------------|--|
| Release Solicitation           | August 2025  |
| Deadline to Submit Proposal    | January 30, 2027 at 12:00 p.m. PST or until funds are expended (whichever comes first) |
| Project Evaluation             | Upon Submission  |
| Agreement Execution            | January 2026 through April 2027  |
| Procurement and Deployment     | January 2026 through September 2027  |
| Invoice Review and Payment     | June 2026 through February 2028  |
| Performance and usage tracking | Commencing after Deployment for five years   |

NOTE: Re-issue PAs as needed  
Dates for Measure 2.2 TBD

# Charging Infrastructure Deployment Incentive Program (Measure 1)

## ► Eligible Entities:

- Entities that propose to develop and operate electric charging infrastructure to support HD vehicles involved in goods movement

## ► Location:

- Proposed infrastructure must be in one of the two MSAs

## ► Requirements:

- Build America Buy America
- EVIPT certified electricians
- Electrical installer must be a NECA/IBEW contractor

| Available Funding<br>Rebate Amount |                |
|------------------------------------|----------------|
| Infrastructure equipment           | up to \$700/kW |

- Installation costs are not eligible for the rebate
- The rebate can only be used for the equipment on the consumer's side of utility meter or behind-the-meter

# Battery Electric Heavy-Duty Trucks Program (Measure 2.1)

11

► **Eligible Entities:**

- Fleet/Equipment Owner

► **Operating Location:**

- Equipment must be domiciled in one of the two MSAs

► **Existing Equipment Requirements:**

- Class 8 HHD Vehicles (GVWR of 33,001 pounds or greater) involved in good movement
- Diesel fueled

► **Replacement Equipment Requirements:**

- New Battery Electric Class 8 HHD Vehicle

- Rebate-based with a geographic funding minimum for each county within the two MSAs, when possible

| Vehicle                | Rebate Per Vehicle |
|------------------------|--------------------|
| BE Class 8 HHD Vehicle | Up to \$400,000    |



# Last Mile Freight Program - Class 4 & 5 Vehicle Replacement Program (Measure 2.2)

12

- ▶ SCAG will administer a rebate program to fund Class 4/5 battery-electric vehicles (max rebate \$67,000 per vehicle)
- ▶ Develop an implementation plan and program announcement for how the rebate program will be administered
- ▶ Include stakeholder engagement and outreach seeking input from public agency, industry, and local communities
- ▶ Require vehicle replacement through scrappage to achieve the emission reduction goals



# Last Mile Freight Program - Class 4 & 5 Vehicle Replacement Program (Measure 2.2) (Cont'd)

13

## Eligible Entities:

- Fleet Owners, OEMs, and Dealerships

## Operating Location:

- Vehicles must be domiciled in one of the two MSAs

## Existing Equipment Requirements:

- Diesel fueled mobile vehicles
- Medium-duty vehicles used in goods movement

## Replacement Equipment Requirements:

- New Battery Electric Class 4 and Class 5 vehicles used in goods movement



- Rebates not to exceed \$67,000 per vehicle

# Battery Electric Cargo Handling Equipment Program (Measure 3)

14

## Eligible Entities:

- Fleet Owners and Operators

## Operating Location:

- Equipment must be domiciled in one of the two MSAs

## Existing Equipment Requirements:

- Diesel or Natural Gas fueled Cargo Handling Equipment
- Top Handlers, Yard Trucks and other

## Replacement Equipment Requirements:

- Battery Electric CHE Equipment

| Project Type | Rebate Amount   |
|--------------|-----------------|
| Yard Truck   | Up to \$300,000 |
| Top Handler  | Up to \$400,000 |



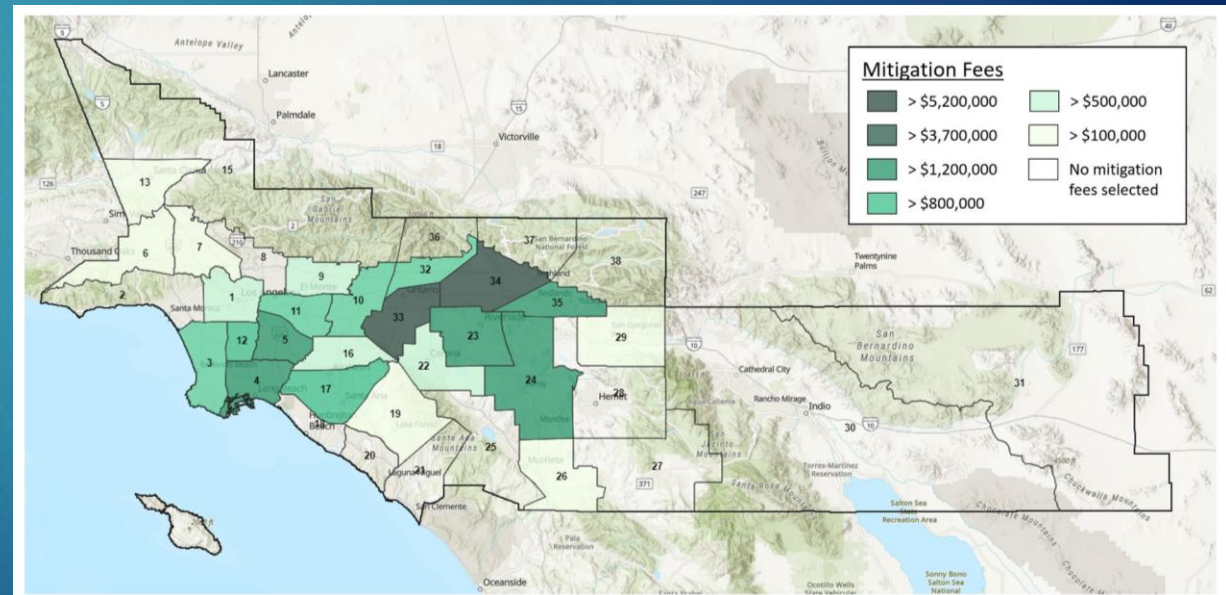
# Discussion and Questions for INVEST CLEAN Program Development



# Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program Funding

16

- ▶ WAIRE Program is a rule applicable to ~4,000 large warehouses in South Coast AQMD
- ▶ Rule provides multiple options to address emissions associated with warehouses, including a mitigation fee
- ▶ Approximately \$48 million in mitigation fees collected to date
- ▶ Funding intended for:
  - ▶ Projects related to reducing NOx and Diesel PM emissions from warehouse sources
  - ▶ Mitigation projects in areas with warehouses that paid the mitigation fee
  - ▶ Mitigation projects with zero emissions infrastructure that use a skilled and trained workforce
- ▶ Anticipate opening solicitation in second half of 2025



**Locations of warehouses that paid mitigation fees as of Aug. 2024**



# Draft Design of Year 2025 WAIRE Mitigation Program

17

- ▶ First come-first serve (in each geographic area)
- ▶ Stacking with other funding programs allowed
- ▶ Requires at least 15% cost share from applicant (considering all incentives)
  - ▶ Eligible cost: total vehicle or equipment purchase price (including taxes and fees)
- ▶ No scrapping required
- ▶ Examples of potential types of funded projects:
  - ▶ Zero emission on-road trucks or yard trucks (electric or hydrogen)
  - ▶ MD/HD zero emission charging and fueling infrastructure (not including installation costs)
  - ▶ Zero emission locomotives that go to warehouses



Submit all comments related to INVEST CLEAN by  
**June 3, 2025**

Email: **[InvestClean@aqmd.gov](mailto:InvestClean@aqmd.gov)**

**Questions Related to WAIRE**  
**Email: [waire-program@aqmd.gov](mailto:waire-program@aqmd.gov)**

*Please ensure that any trade secret information being provided  
is marked accordingly\**

*<https://www.aqmd.gov/docs/default-source/default-document-library/Guidelines/prg-guidelines.pdf>*