



South Coast
Air Quality
Management District

INVEST CLEAN

Climate Pollution Reduction Grant U.S. Environmental Protection Agency



Battery- Electric Switcher Locomotive Workshop

FEBRUARY 19, 2025

ALYSSA YAN



Presentation Outline



Background



Measure 4 – Locomotives



Request for Proposal Timeline



Discussion & Questions

Grant Background

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- Inflation Reduction Act (IRA)
- EPA Climate Pollution Reduction Grant Program (CPRG)-\$4.6B available nationally
- Regional partnership



Program's Purpose/Goals:

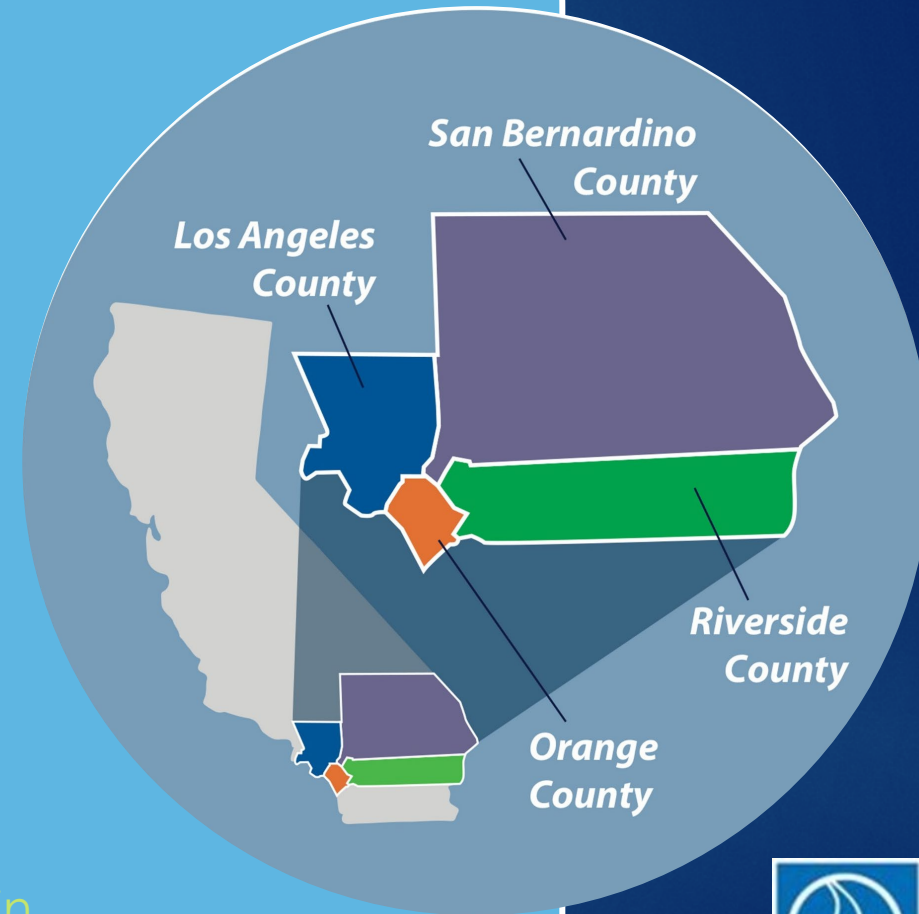
- Modernization of SoCal Goods movement and logistics network
- Reduce air pollution and provide air quality benefit to the region
- Support jobs
- Leverage funding, maximize emission reductions



South Coast AQMD's INVEST CLEAN

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- US EPA award of close to \$500M
- 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
- Partnership with two Metropolitan Statistical Areas (MSAs)
 - LA-OC MSA: Los Angeles – Long Beach – Anaheim
 - Inland Empire MSA: Riverside – San Bernardino – Ontario
- INVEST CLEAN webpage:
<https://www.aqmd.gov/home/technology/implementation/invest-clean>



INVEST CLEAN - Four Incentive Measures

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Measure 1

\$178.5 million

Heavy-Duty
Charging
Infrastructure



Measure 2

\$78 million

Class 8 Heavy-
Duty Truck and
Last Mile
Freight for
Class 4 & 5
Vehicles



Measure 3

\$20.6 million

Cargo
Handling
Equipment



Measure 4

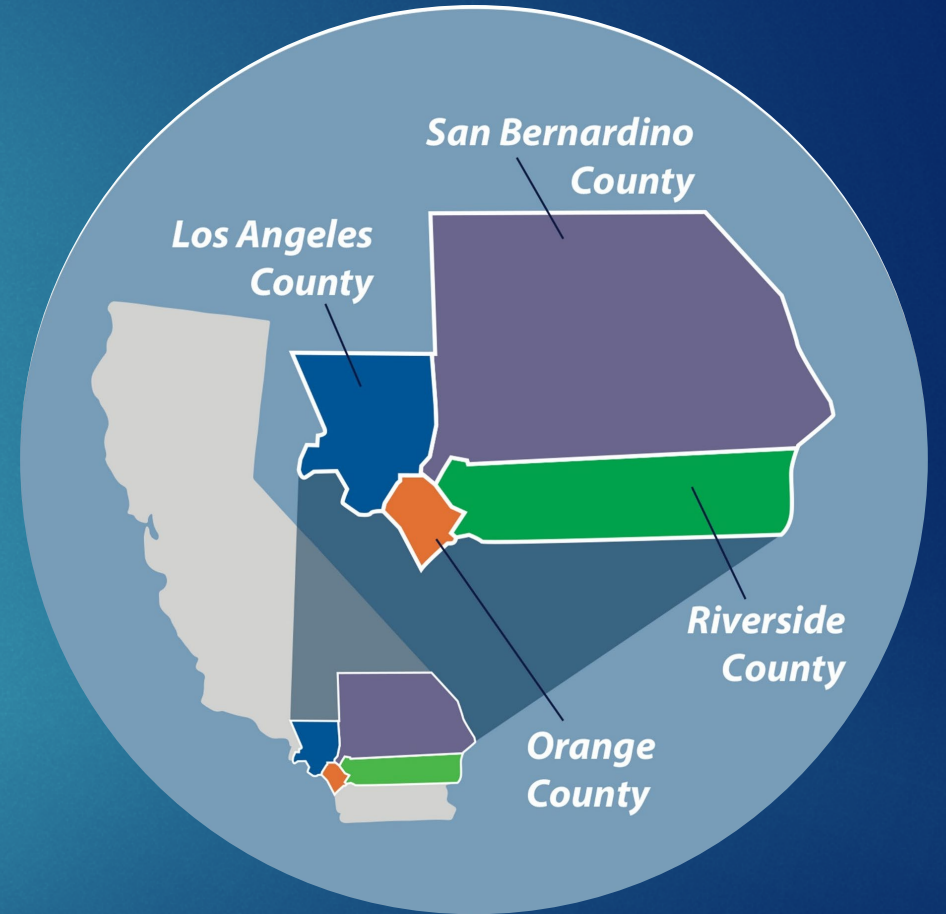
\$190.8 million

Battery
Electric
Locomotive
Projects

Measure 4: Battery-Electric Locomotives

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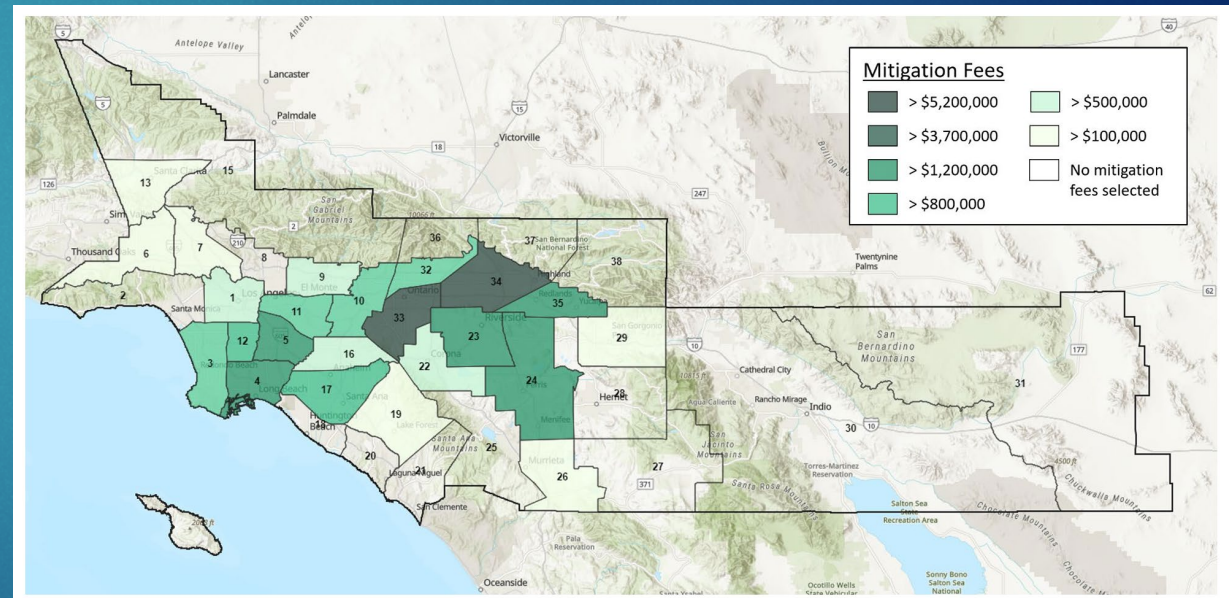
- Eligible Entity
 - Locomotive manufacturers,
 - Owners or operators,
 - Others
- Operating Location
 - Domiciled in one of the MSAs
- Existing Equipment
 - Diesel-fueled mobile vehicle (Switcher or other equivalent)
- New Equipment
 - New ZE switcher locomotive
- Applicant submit emission reduction plan
- Charging Equipment





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

- ▶ 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 \$42 million in mitigation fees collected to date
- ▶ Funding intended for:
 - ▶ Projects related to emissions from warehouse sources
 - ▶ Example: zero emission locomotives that go to warehouses may be eligible
 - ▶ Mitigation projects for areas with warehouses that paid the mitigation fee
 - ▶ Mitigation projects with zero emissions infrastructure that use a skilled and trained workforce



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

*Additional workshops about WAIRE funding may be scheduled at another time

Measure 4 Funding

- Anticipated funding amount \$190.8 M (CPRG)
- At least 18 or more locomotives and chargers
- Other funding may be used

Tentative Request for Proposal Timeline

Item	Date
Release Solicitation	April 4, 2025 (TBD)
Deadline to Submit Proposal	September 5, 2025 at 12 PM*
Project Evaluation	September 2025 through October 2026*
Subaward Agreement Execution	October 2025 through August 2027
Procurement and Deployment	January 2026 through September 2028
Invoice Review and Payment	June 2026 through March 2029
Performance and usage tracking	Starting June 2026 to end of project life

*Second round if needed



Discussion and Questions for Request for Proposal Development

1. Leasing Options
2. Project Emission Reduction
 - ▶ Emission Reduction quantification
 - ▶ Parked/Scrapped
 - ▶ Emission reduction tracking and documentation
3. Reporting requirements for rail operator (usage, parked/destruction of existing mobile equipment)
4. Replacement of existing chassis and other technology options
5. Co-Funding & Stacking
 - ▶ i.e., WAIRE Funds, Carl Moyer Program (if scrapping)
6. Project life
7. Data collection

Submit all comments by
February 28, 2025

Email: **InvestClean-Locomotive@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>*