



Proposed In-Use Locomotive Regulation

2nd Hearing April 27, 2023

Supporting Health, Air Quality and Climate Goals



Reduce community health risk
(Assembly Bill 617)



Attain regional air standards
(2022 State Strategy for the State Implementation Plan)

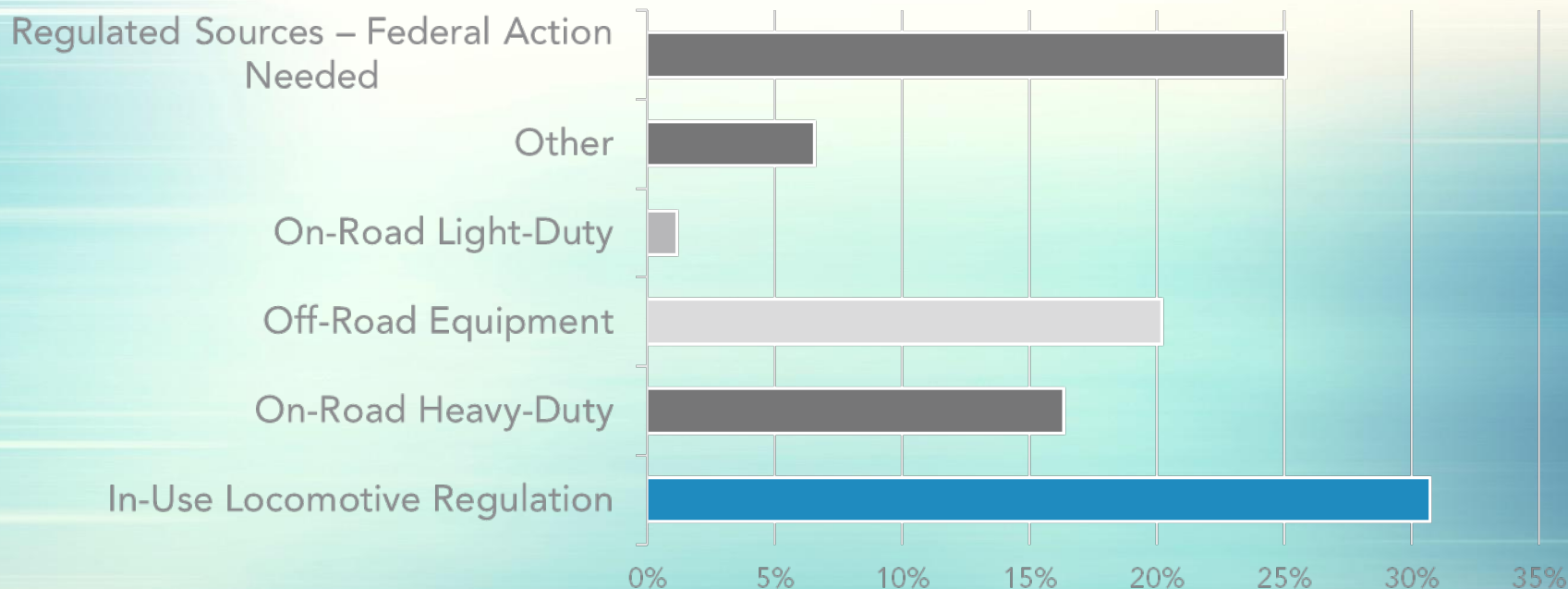


Mitigate climate change (Scoping Plan and
Short-Lived Climate Pollutant Reduction Strategy)







Executive Order N-79-20
(ZE for off-road equipment by 2035, where feasible)

2022 State SIP Strategy Emission Reductions 2037

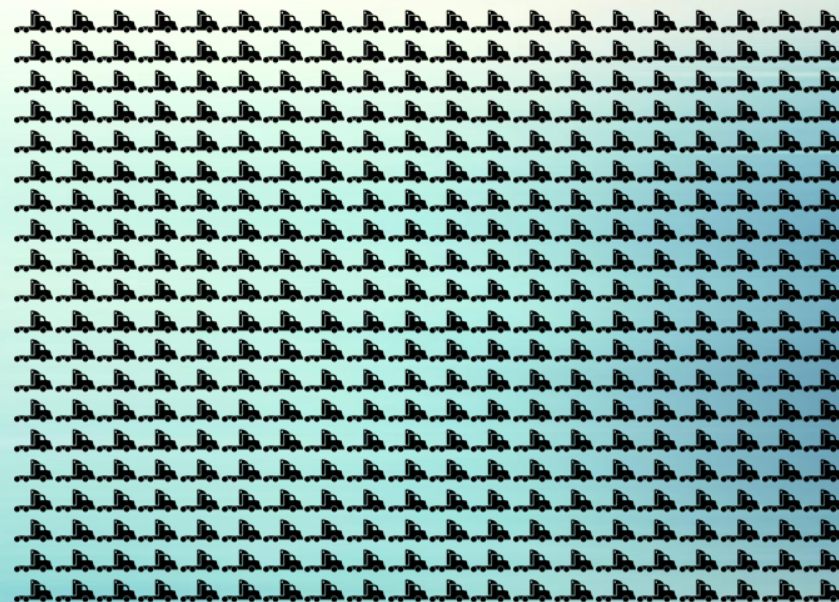


Types of Locomotives

	Line Haul	Switch	Passenger	Historic
				
Operation	Moving heavy freight	Moving railcars in and around railyards	Transporting passengers	Used for historic and educations experiences
Distance (range)	Nationwide or Local	Local (railyards or industrial facilities)	Nationwide or Local	Local
Operators	Class I-III	Class I-III, Industrial, and Passenger	Passenger	Historic and Heritage Railroads

In-Use Locomotive Regulation Need

Exposure to the emissions from **one train** is worse than being exposed to the emissions from **400 trucks**.



Locomotive Regulation Summary

Spending Account

- Annual funding requirement based on locomotive emissions.
- Funds used for cleaner locomotive technologies

In-Use Operational Requirements

- Beginning in 2030, only locomotives less than 23 years old operate in State
- 2030 and 2035 ZE operational requirements

Idling Requirement

- Idling prohibited over 30 minutes (unless exempt)

Recordkeeping and Reporting

- Annual locomotive reporting by California Air District

Flexibility

- Temporary Operating Extension
- Small Business Hardship Extension
- Historic Locomotive Low-Use Exemption
- 2027 and 2032 Assessments
- Alternative Compliance Options
- ***Unavailability, manufacture and installation delay extensions***

Multiple Compliance Pathways for all Fleets

1



Spending Account and
In-Use Operational
Requirements

2



Alternative
Compliance
Plan

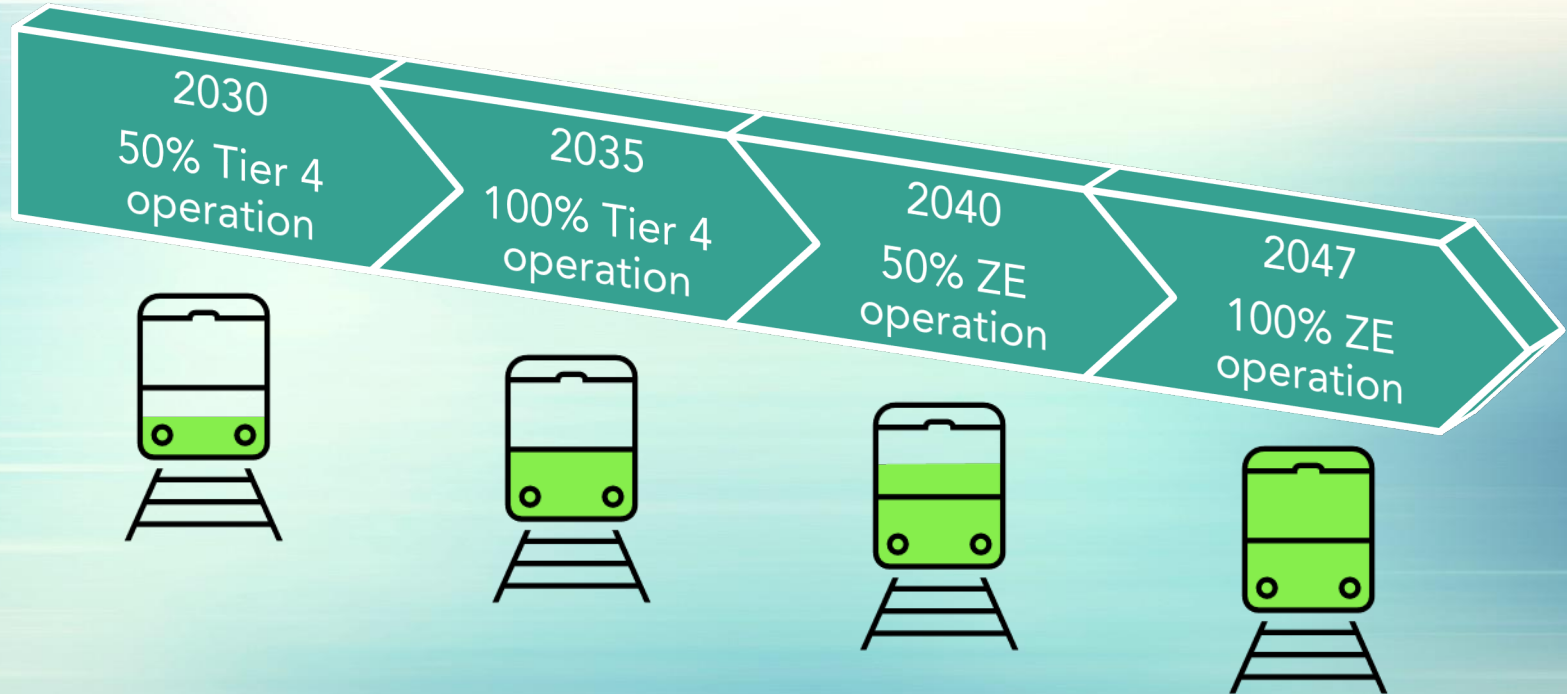
3



Alternative Fleet
Milestone Option

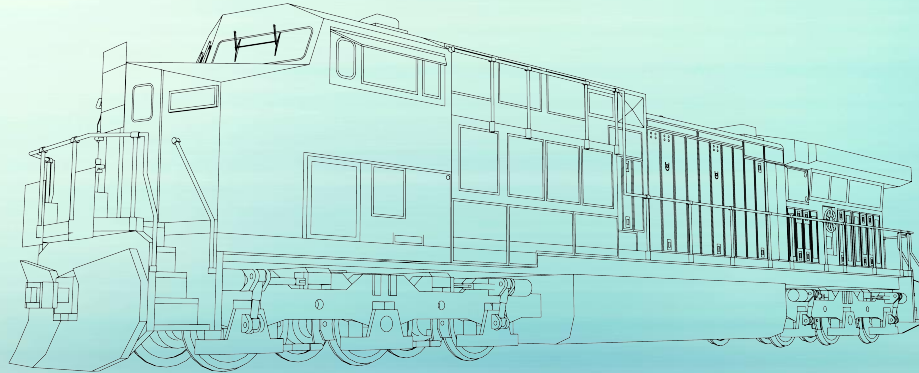
15-Day Changes

Alternative Fleet Milestone Option



15-Day Changes (Continued)

- Extensions for manufacture and/or installation delays, or delays due to unavailability
- Zero Emission Conversions Document



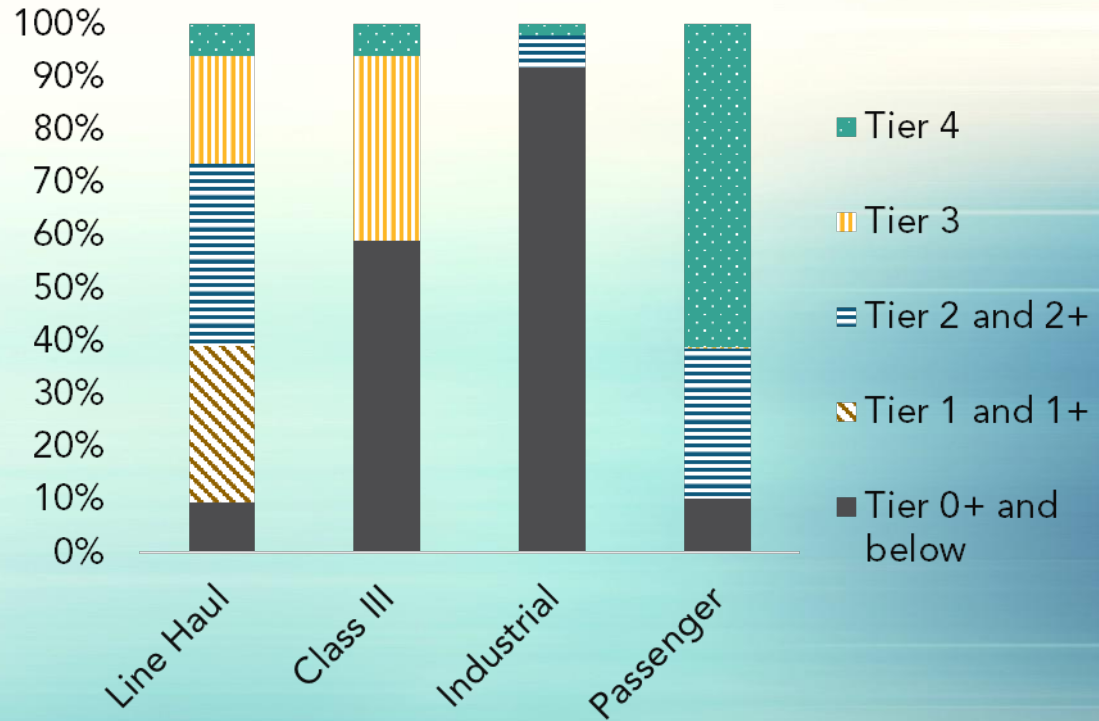
15-Day Comments

- Released for comment March 1st to March 16th
- Main comments received
 - Support for Proposed Regulation
 - Support for AFMO
 - Requests for stricter requirements



15-Day Comments (Continued)

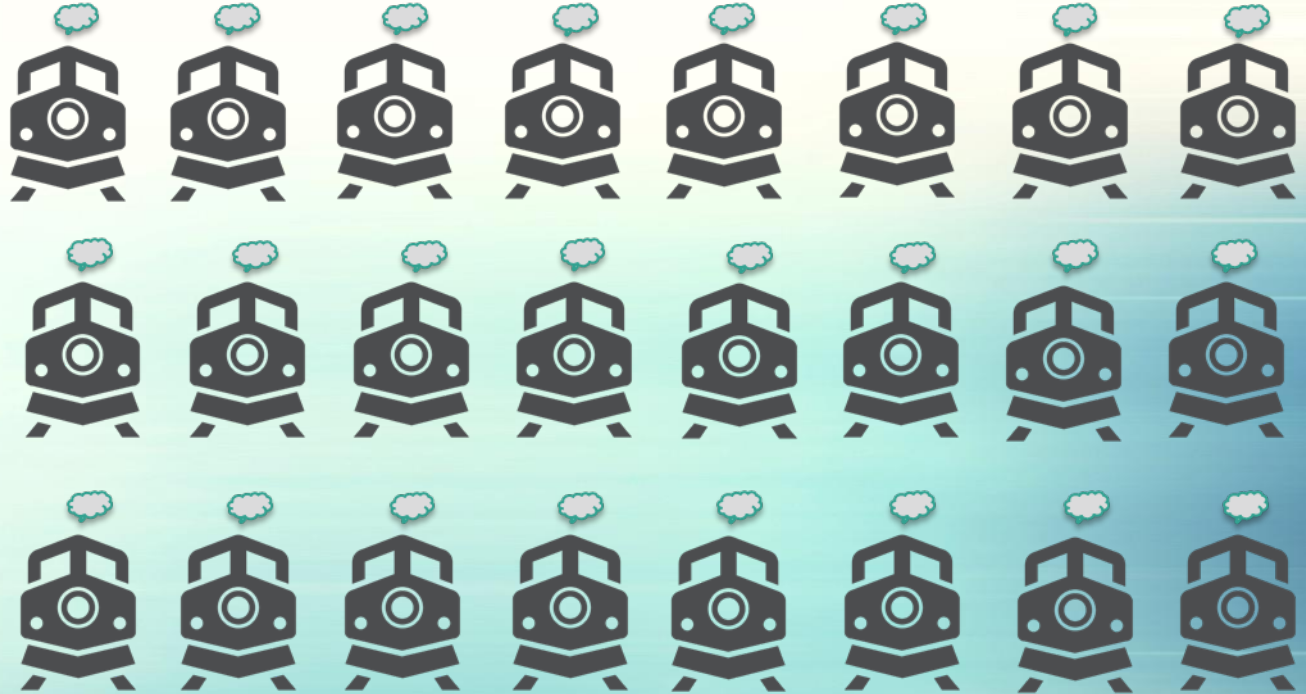
- Concerns about costs
- Appeals to include additional compliance options
- Requests to exempt smaller operators



Why Low-Use Doesn't Equal Low Harm



One Pre-Tier 0
switcher emits the
same toxic diesel
PM as 24 Tier 4
switchers



Costs and Benefits

**\$13.8
Billion**
Costs

**\$32.0
Billion**
Health
Savings

**-7,400 tons
PM**
**-386,300
tons NOx**
**-21.6 MMT
GHGs**

90%
Reduction
in Cancer
Risk

Available Incentive Funding*

**AB 617 CAP
Incentives**
~\$240 million

Carl Moyer
~\$89 million

CORE
\$TBD

LCT/AQIP
~\$165 million

**VW Mitigation
Trust**
~\$16 million

TIRCP
\$TBD

CRISI
\$1 Billion

* Funding amounts are not locomotive-specific. More information and program links available on the CARB webpage at: <https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california/incentives-locomotives>

Environmental Analysis (EA)

- Draft EA released for public comment 9/20/2022–11/7/2022
- Potentially significant impacts found for some resource areas
- Final EA and written responses to comments published on 4/14/2023



Recommendation to Adopt Board Resolution 23-12

- Approve written responses to environmental analysis comments
- Certify the Final EA and the required CEQA findings
- Adopt the Proposed Regulation including 15-day modifications