

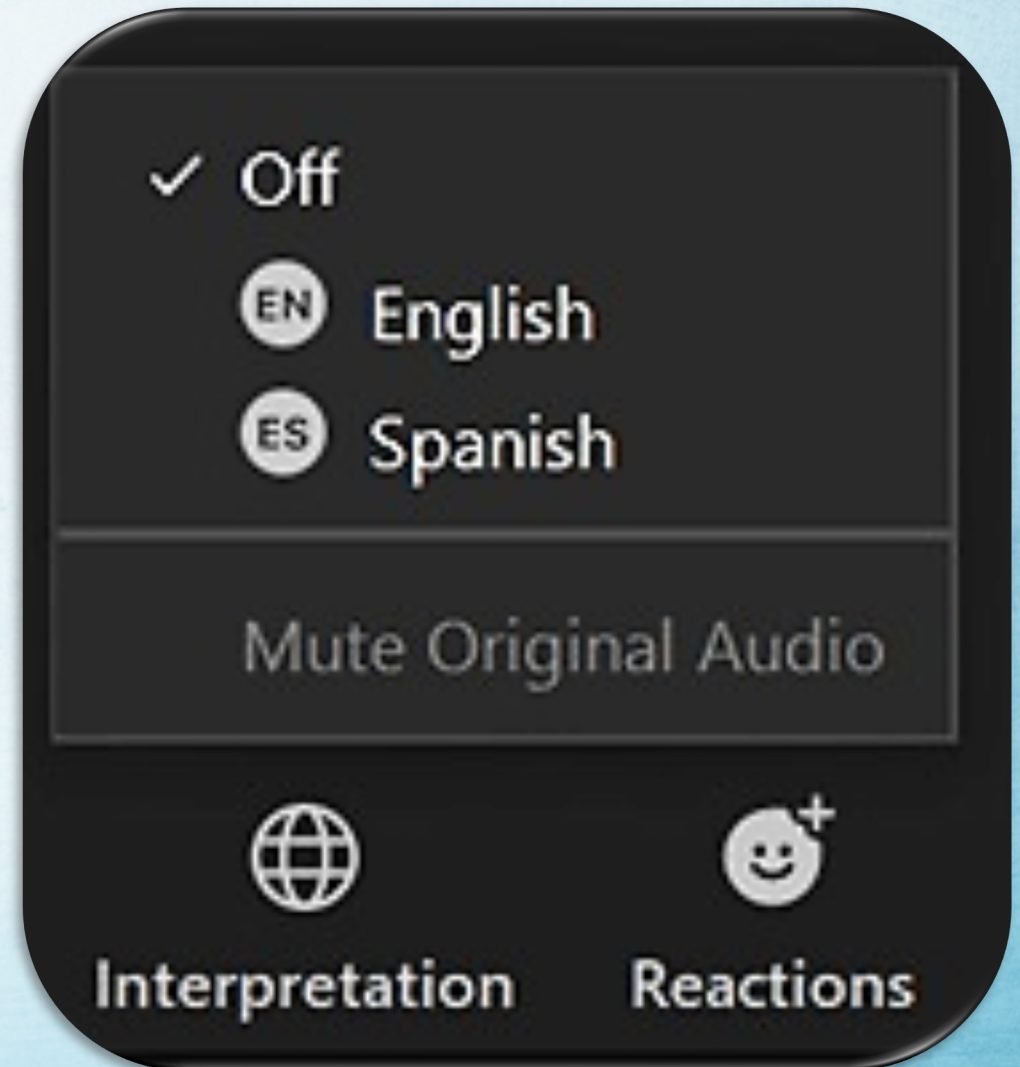


Ocean-Going Vessel In-Transit Rulemaking Kickoff & Emissions Inventory Workshop

December 5, 2024

Listening to Language Interpretation

- In your meeting/webinar controls, click **Interpretation** (located at bottom of screen)
- Click the language that you would like to hear. Options for this meeting are English and Spanish
- After you have chosen your language, you must click **Mute Original Audio**

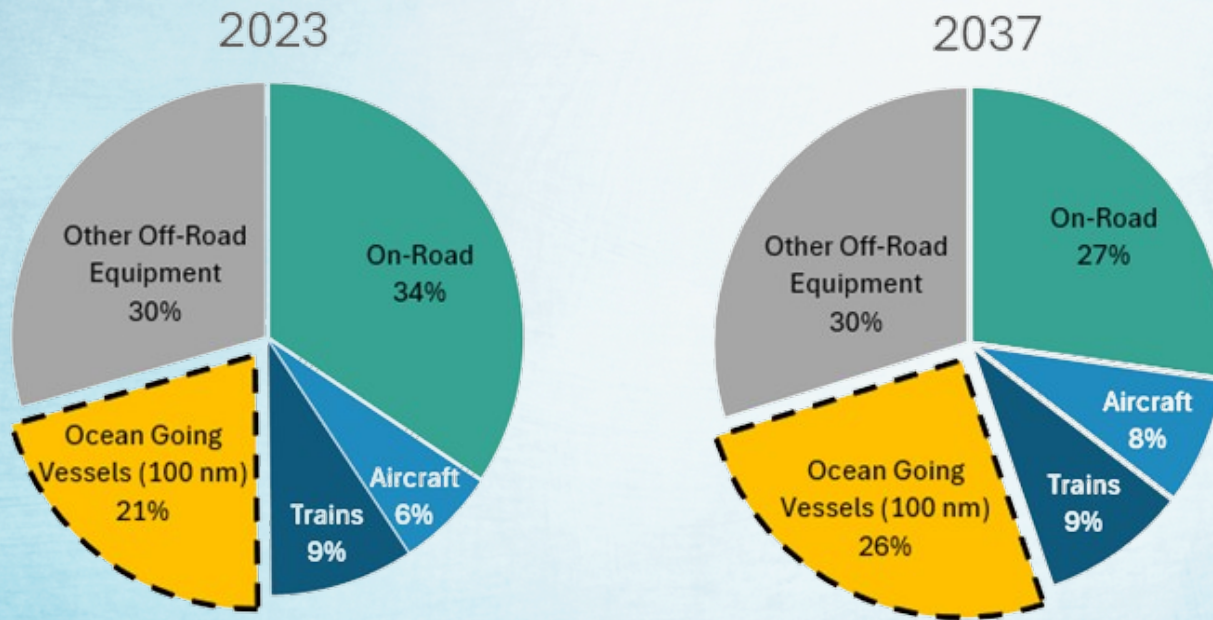


Agenda

- Welcome and Opening Remarks
 - Bonnie Soriano, Chief, Freight Activity Branch, CARB
- Presentation: Ocean-Going Vessel In-Transit Rulemaking
 - CARB, Transportation & Toxics Division
- In-Transit Rulemaking Q&A (20 minutes)
- Break (5 minutes)
- Presentation: Ocean-Going Vessel Emissions Inventory Update
 - CARB, Air Quality Planning & Science Division
- Emissions Inventory Q&A (30 minutes)
- Closing Remarks

Need for Rulemaking

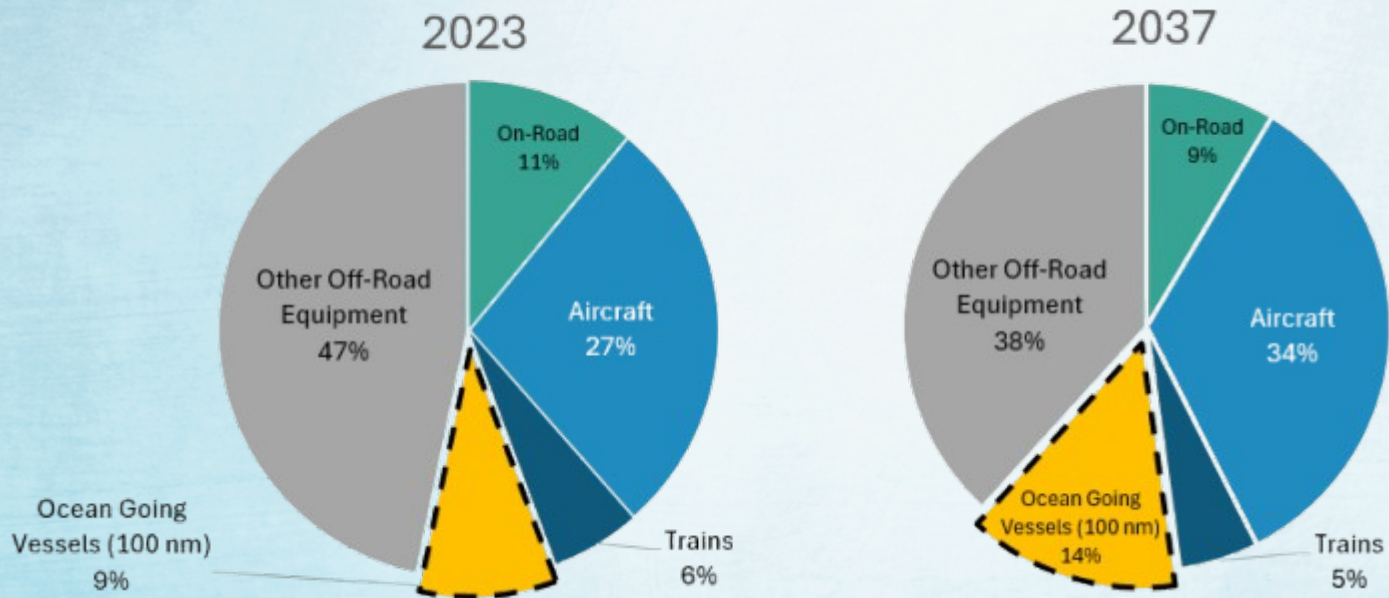
Statewide mobile source NO_x emissions contributions by sector in 2023 and 2037



- Ocean-going vessels (OGV) are one of the largest contributors of criteria pollutants in California
- NO_x reductions essential to help South Coast Air Basin reach attainment

Need for Rulemaking (cont.)

Statewide mobile source PM emissions contributions by sector in 2023 and 2037



- 2022 State SIP Strategy included emission reductions from OGVs
- PM/diesel PM reductions provide needed health benefits for disadvantaged port communities and supports Assembly Bill 617

Building on Federal and International Efforts

- CARB, South Coast Air Quality Management District (SCAQMD), and the U.S. Environmental Protection Agency (EPA) recently re-committed to a long-term collaboration to reduce NO_x emissions
 - Targeting emissions from aircraft, locomotives, OGVs, and nonroad engines, as well as stationary sources
 - [Joint Agency Statement](#) (July 2024)
 - [CARB Letter of Intent](#) (July 2024)
- The International Maritime Organization (IMO) is considering future regulations that target reductions in GHGs from OGVs, but these measures do not address criteria pollutants or toxics

Benefits of Emissions Reductions

- Emissions from OGVs include criteria pollutants (NO_x, PM), air toxic contaminants (DPM), and GHGs
- NO_x exposure is linked to:
 - Asthma
 - Coughing, wheezing, difficulty breathing
 - Increased susceptibility to respiratory infections
- PM exposure is linked to:
 - Premature mortality
 - Bronchitis
 - Asthma
 - Increased risk of lung cancer (DPM)
- Adverse health impacts associated with air pollution have a negative economic impact on California

Regulation Development Timeline



Rulemaking Components

- **Pre-Regulation Development**

- Kick off Workshop
- Establish baseline emissions inventory
- Draft stakeholder/community engagement plan
- Research and data collection
- Outreach

- **Regulation Development**

- Draft concepts
- Workshops
- Cost analysis, health risk modeling
- Draft regulation language
- Stakeholder/community engagement

- **Formal Rulemaking**

- SRIA/Form 399
- Environmental Review
- ISOR
- Public Notice
- Board Hearing(s)
- 15-day changes
- Stakeholder/community engagement

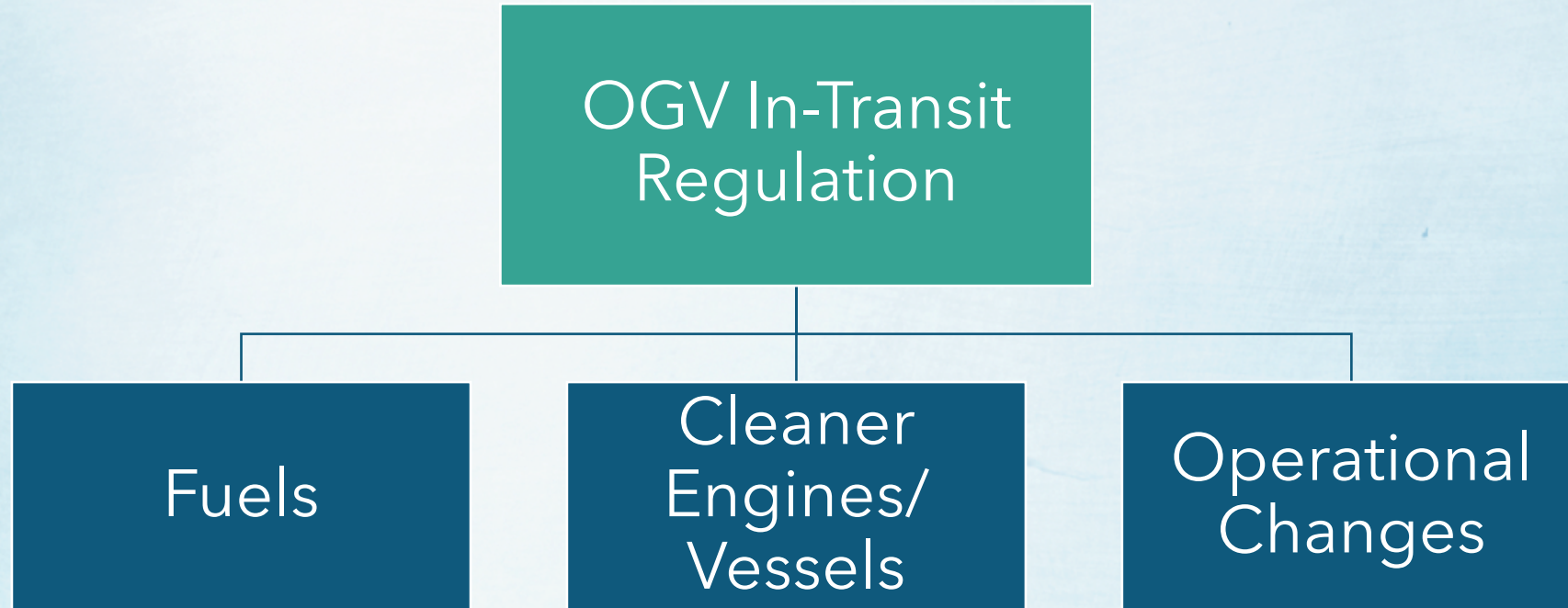
- **Post-Board Approval**

- Final regulation language
- FSOR
- FSOR/OAL submittal
- Implementation & stakeholder/community engagement

Opportunities for Public Comment

- Informal stakeholder/public engagement:
 - Workshops
 - Public outreach plan for better community engagement
 - Meetings/outreach
- Formal comment periods
 - 45-day comment period when the Public Notice is posted
 - 15-day comment period if changes are made
 - Public comment during Board Hearings
- Formal comments are compiled and addressed in the Final Statement of Reasons (FSOR) & Response to Comments on the Environmental Analysis (EA)

Potential Strategy Categories



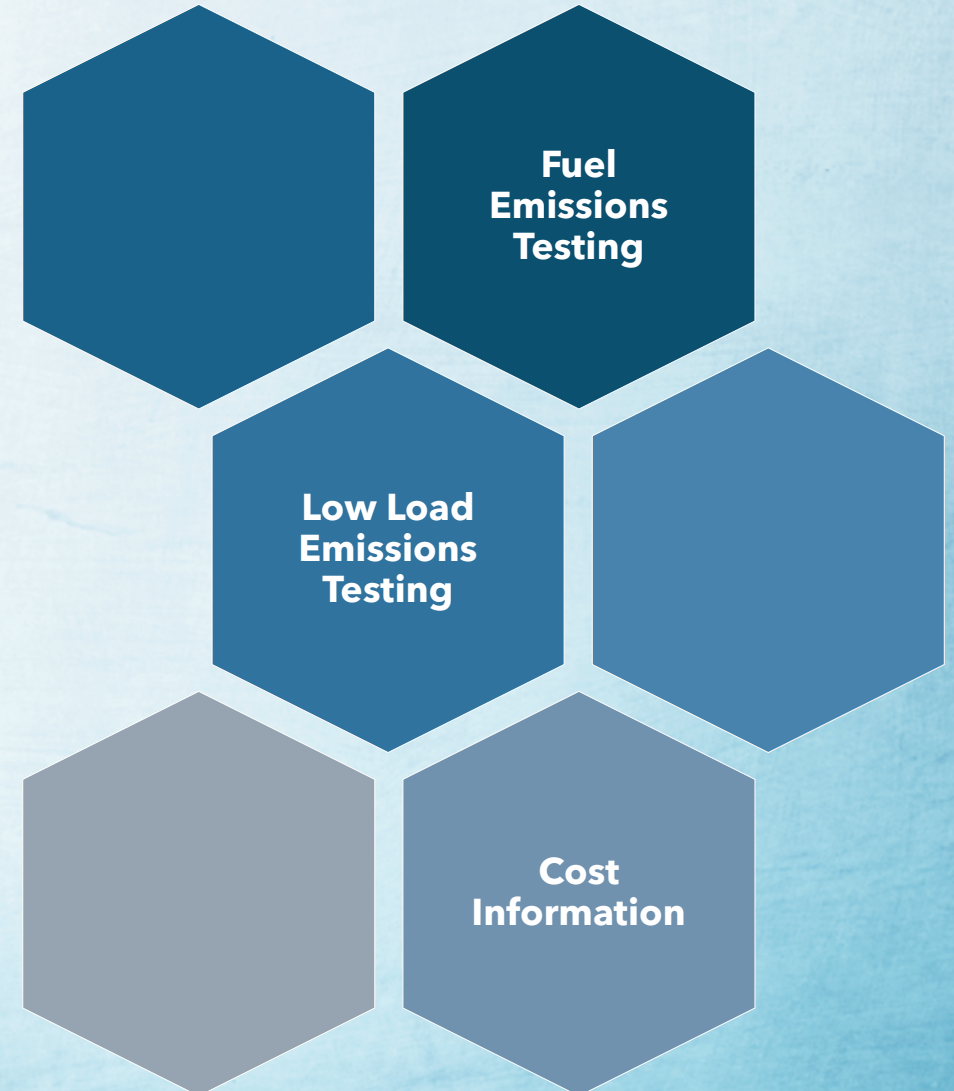
- CARB staff is exploring potential strategies and evaluating which measures are priority for reducing emissions

OGV In-Transit Contracts

- UC Riverside
 - Commercial Harbor Craft and OGV emissions testing
 - Priorities include:
 - CHC main engines
 - OGV auxiliary and main engines at anchor and in-transit
 - Tier III OGV main engines at low-loads (<25%)
 - Alternative fuels for OGVs
- UC Irvine - OGV Technology Assessment
 - Evaluate available/future technologies to reduce OGV emissions
 - Alternative fuel and electricity infrastructure/availability

Data Gathering

- CARB is gathering data in support of the In-Transit Rule
- Some areas where additional data is necessary:
 - Fuel testing (renewable/biodiesel, methanol, and other alternative fuels)
 - Low load emissions testing
 - Cost information (engines, fuels, etc.)
 - Other advanced technologies



Next Steps

Community
Engagement
Plan

Refine OGV
Emissions
Inventory

Research &
Testing

Develop
Potential
Strategies

Contact Us!

- Visit our website at: <https://ww2.arb.ca.gov/our-work/programs/potential-ocean-going-vessel-ogv-transit-regulation>
- Email our inbox at: OGVintransit@arb.ca.gov
- Sign up for our listserv: [Marine Vessel Activities \(Commercial\)](#)

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