

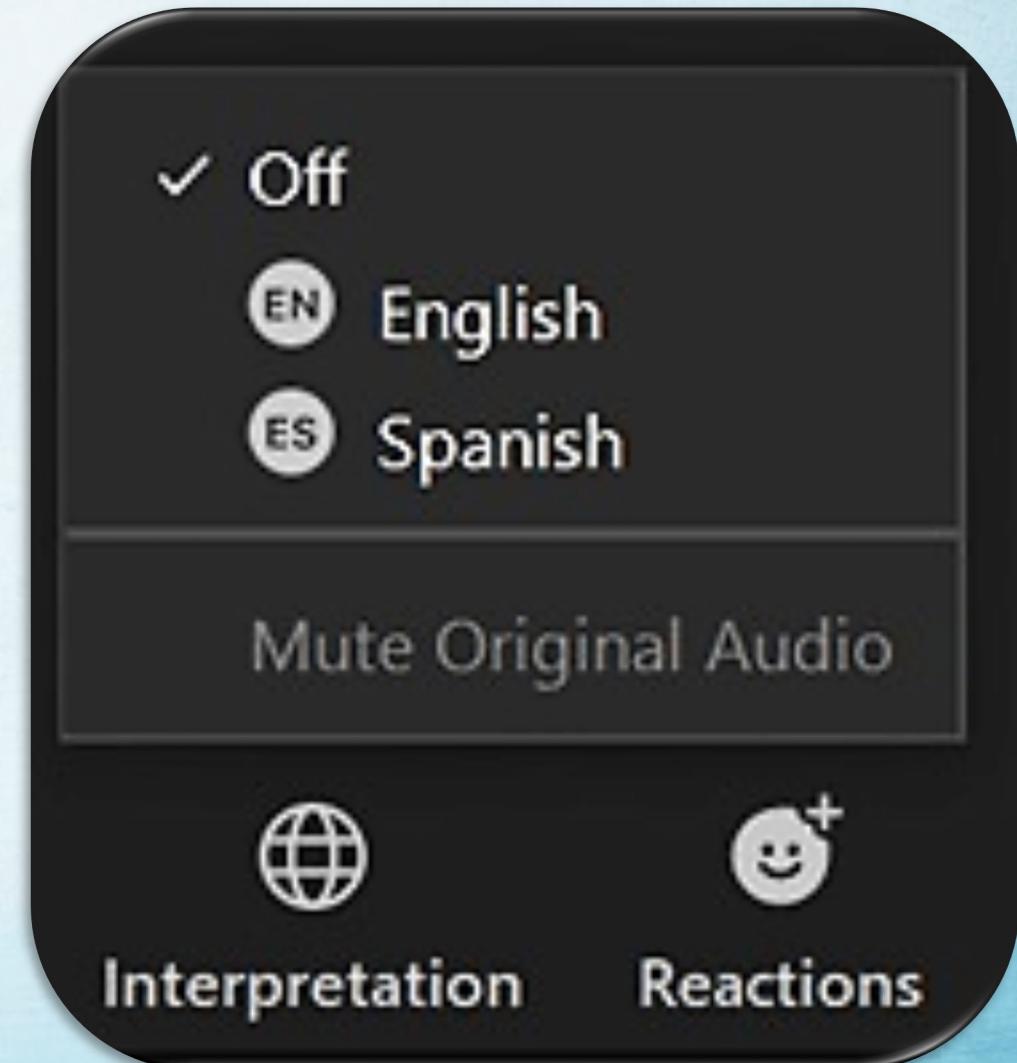


Ocean-Going Vessel (OGV) In-Transit Regulatory Development Workshop

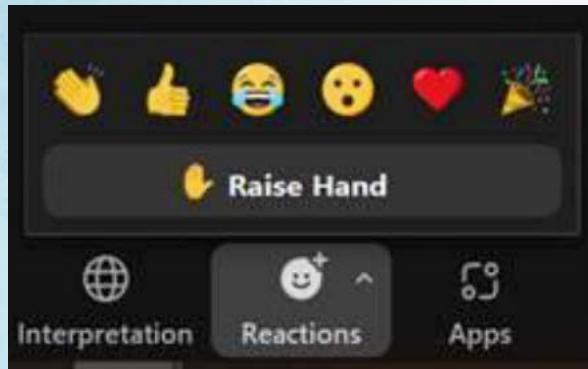
February 4, 2026

Listening to Language Interpretation

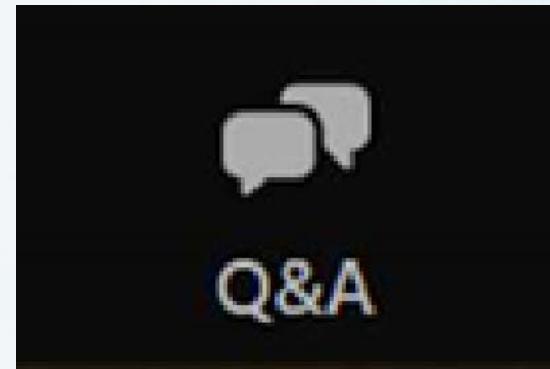
- In your meeting/webinar controls, click **Interpretation** (located at bottom of screen)
- Click the language that you would like to hear. Options for this meeting are English and Spanish
- After you have chosen your language, you must click **Mute Original Audio**



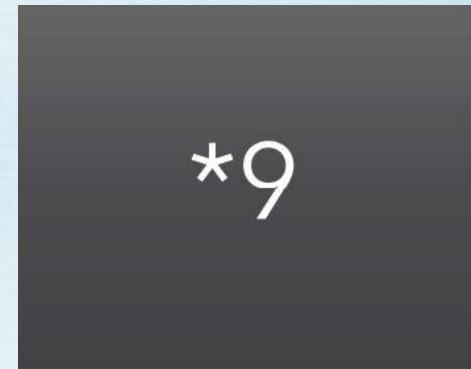
How to Participate During the Workshop



Zoom: To be added to the speaking queue, use the Raise Hand feature



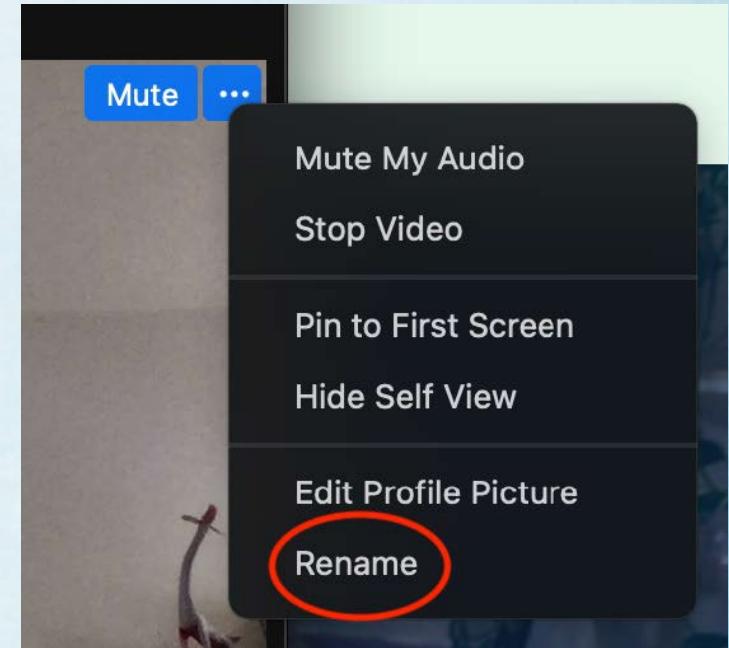
Zoom: Submit questions using the Q&A box



Phone: Press *9 to Raise Hand and *6 to Unmute

Check Your Zoom Name

- To rename, click the dots on the top right side of your picture/video
- Use this naming convention:
 - First Last - Affiliation
(e.g., John Smith - CARB)



Before We Get Started

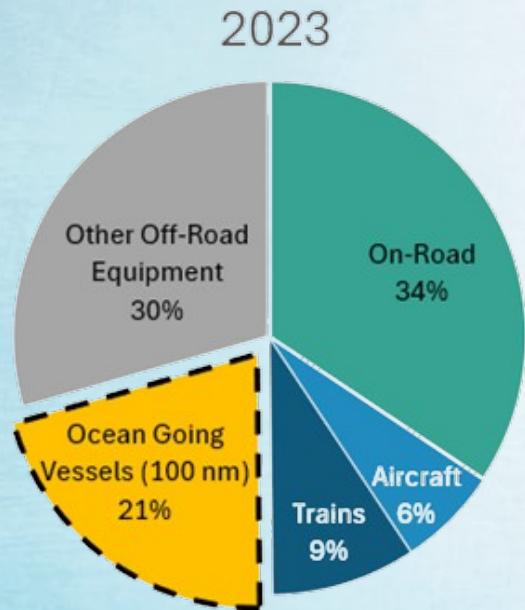
- Need help? Use the Q&A function in Zoom to request assistance
- Slides are available on the OGV In-Transit webpage:
<https://ww2.arb.ca.gov/meetings-workshops>
- Zoom recording will be made available at the link above

Agenda

- Welcome and Opening Remarks
 - Bonnie Soriano, Chief, Freight Activity Branch, CARB
- Presentation: Ocean-Going Vessel In-Transit Rulemaking
 - CARB, Transportation & Toxics Division
- Q&A
- Stakeholder Survey
- Break (~5 minutes)
- Presentation: OGV Technology Assessment
 - University of California, Irvine
- Q&A
- Closing Remarks

Need for Rulemaking

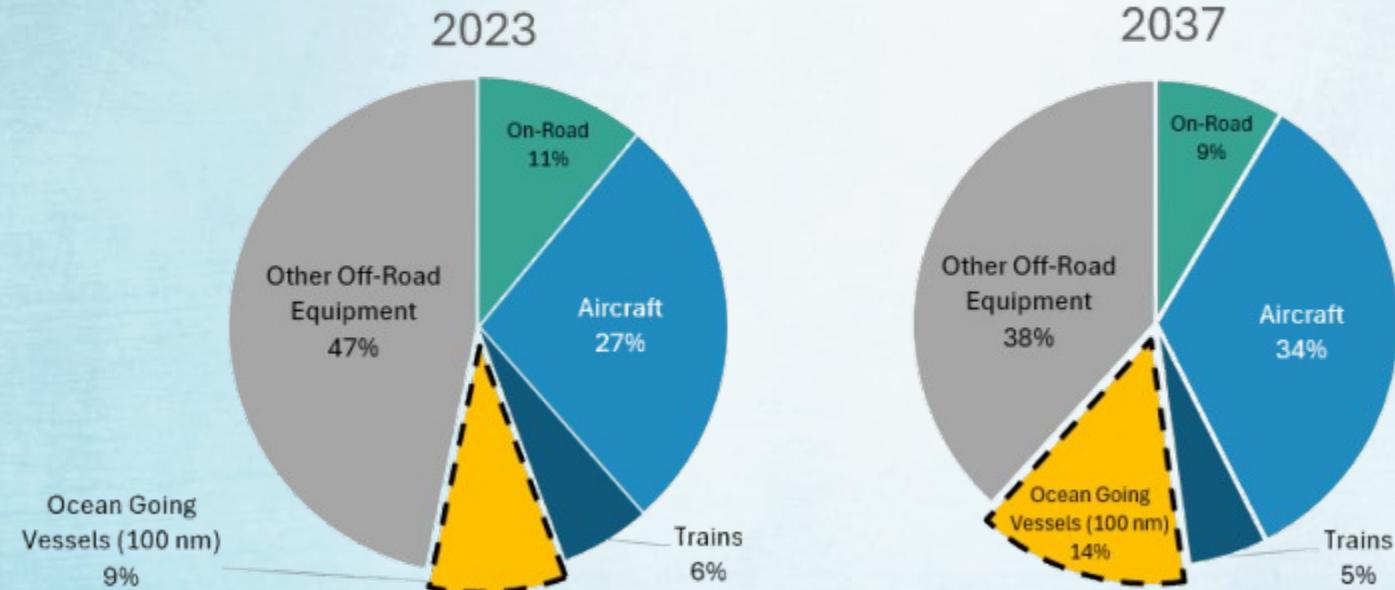
Statewide mobile source NOx emissions contributions by sector in 2023 and 2037



- Ocean-going vessels (OGV) are one of the largest contributors of air pollution in California
- NOx reductions essential to help South Coast Air Basin reach attainment of National Ambient Air Quality Standards

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

Benefits of Emissions Reductions

- Emissions from OGVs include criteria pollutants (NOx, PM), air toxic contaminants (DPM), and GHGs
- NOx 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 cancer (DPM)
- Adverse health impacts associated with air pollution have a negative economic impact on California

Building on Regional and Global Efforts

- There is building international momentum to reduce emissions from the shipping industry.
- Key measures include:
 - **FuelEU Maritime Regulation:** Promotes the use of renewable, low-carbon fuels and clean energy technologies for ships.
 - **EU Emissions Trading System (ETS):** requires shipping companies to pay for their GHG emissions.
 - **International Maritime Organization (IMO):** Considering future rules to reduce GHG emissions from large ships, though these rules don't yet cover other harmful air pollutants or toxic emissions.

Regulation Development Timeline

WE
ARE
HERE

Public Engagement

Pre-Regulation Development

Regulation Development

Rulemaking Document Review/Posting

Board Approval

Post-Board Approval Activities

1-2 Years

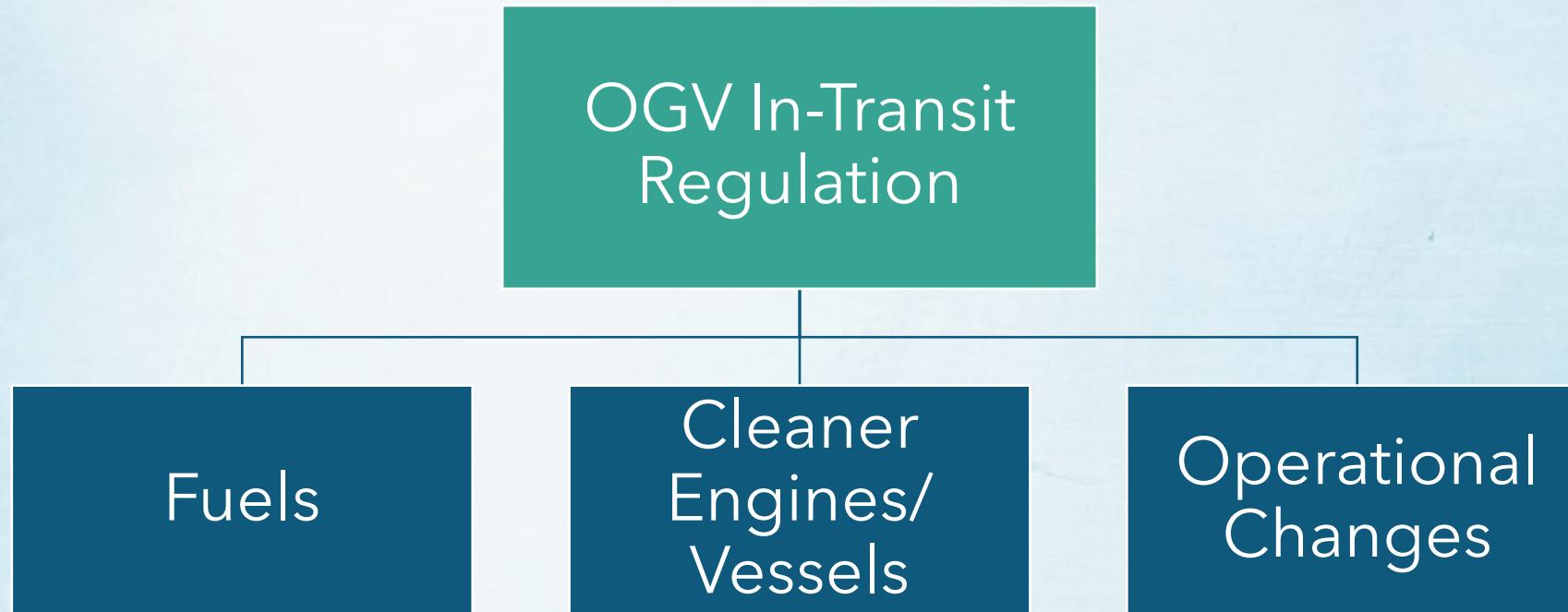
2-3 Years

1 Year

1+ Years

- Stakeholder engagement occurs during all phases
- First two phases are key periods to influence regulatory design

Potential Strategy Categories



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

OGV In-Transit Contracts

- UC Riverside
 - OGV emissions testing
 - Priorities include:
 - 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

Community Engagement Goals



Next Steps

Finalize OGV
Technology
Assessment

Further develop
Community
Engagement
Plan based on
survey results

Emissions
testing and
research

Continue to
develop
regulatory
concepts and
strategies

Contact Us!

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

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Q & A

Survey

- Please take our survey to help us better tailor our future engagement strategy
- Link: [<https://forms.office.com/g/1VGGTpP3T5>]

- QR code:



- Requesting participation by February 20, 2026

Break (5 mins)

Technology Assessment Presentation Feedback

- We are interested in hearing your thoughts on topics such:
 - Technology readiness
 - Timelines for market readiness of new technologies/fuels
 - New technologies/fuels not discussed in UCI presentation
- Please send feedback by February 20th
- Send to CARB directly via the In-Transit inbox:
OGVintransit@arb.ca.gov and Cc UCI: jgreed@uci.edu,
mcdonell@ucicl.uci.edu