

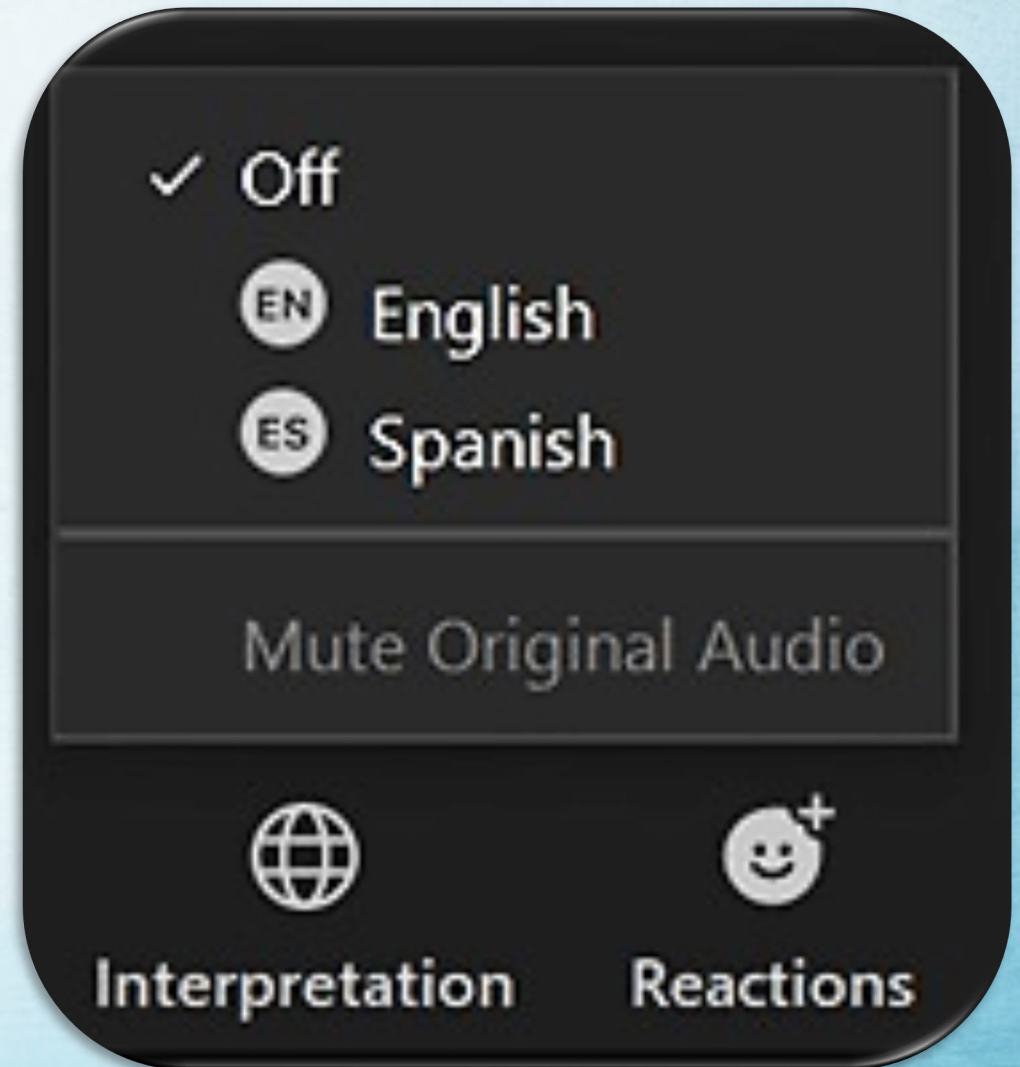


# **Ocean-Going Vessel (OGV) In-Transit Regulatory Development Workshop**

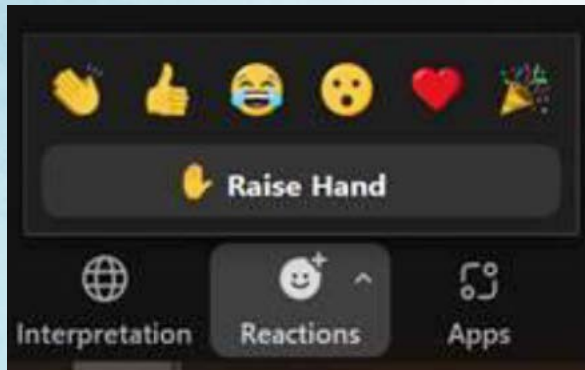
February 4, 2026

# Listening to Language Interpretation

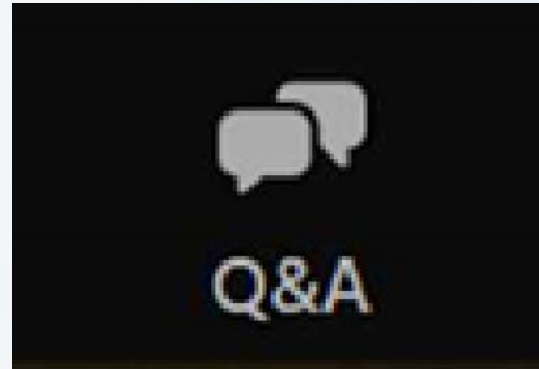
- In your meeting/webinar controls, click **Interpretation** (located at bottom of screen)
- Click the language that you would like to hear. Options for this meeting are English and Spanish
- After you have chosen your language, you must click **Mute Original Audio**



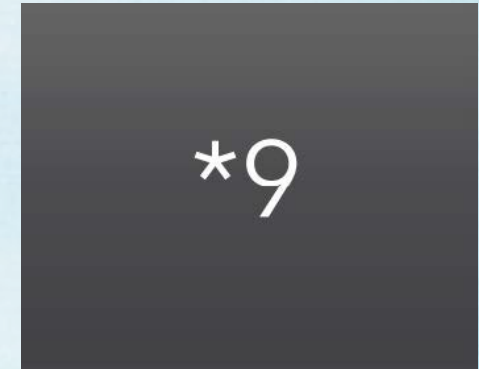
# How to Participate During the Workshop



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



Zoom: Submit questions using the Q&A box

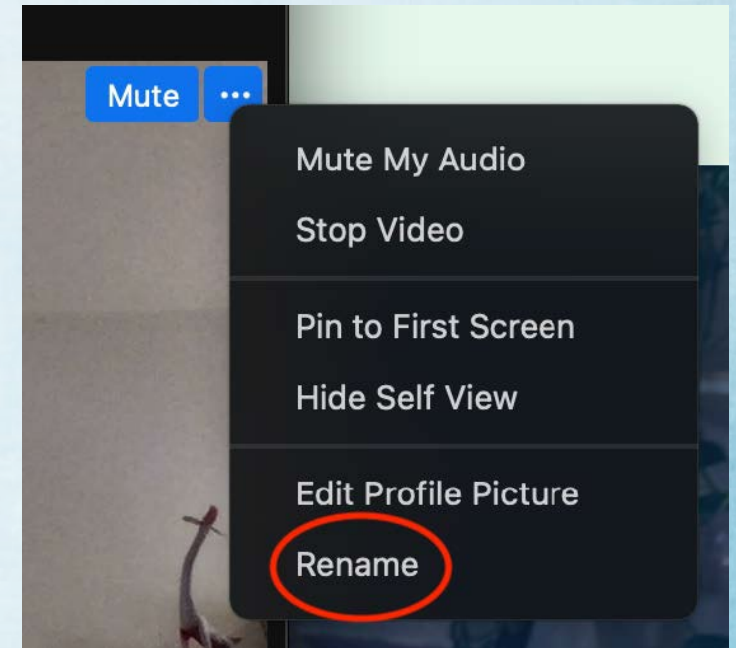


Phone: Press \*9 to Raise Hand and \*6 to Unmute



# 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

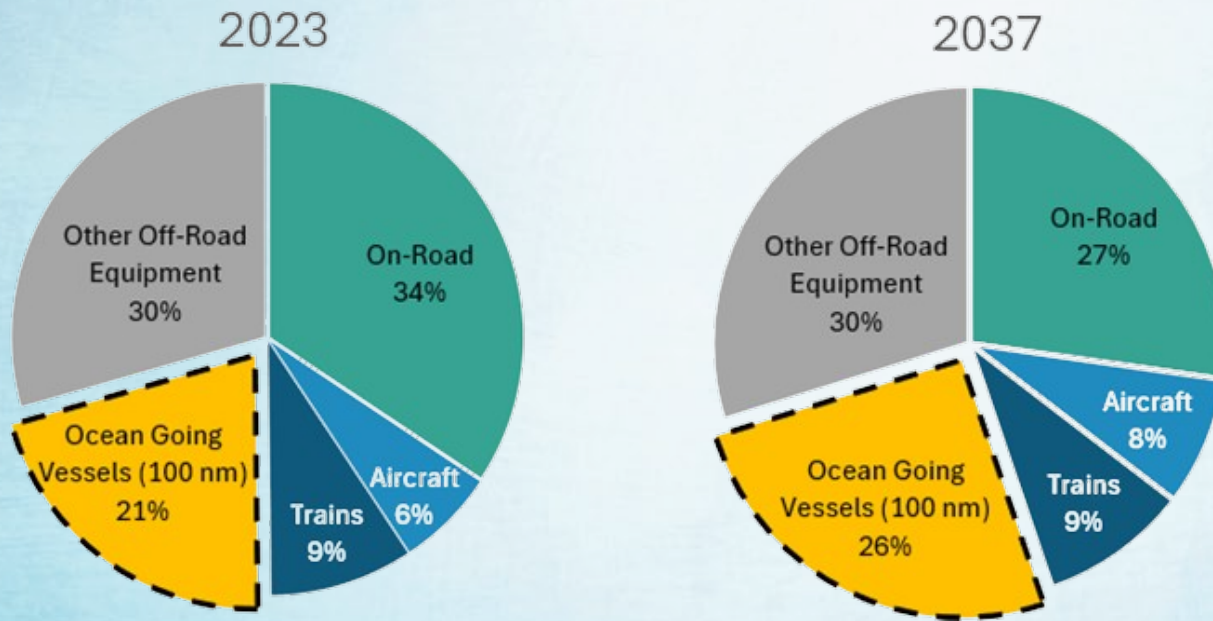


# Agenda

- 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 NO<sub>x</sub> emissions contributions by sector in 2023 and 2037**

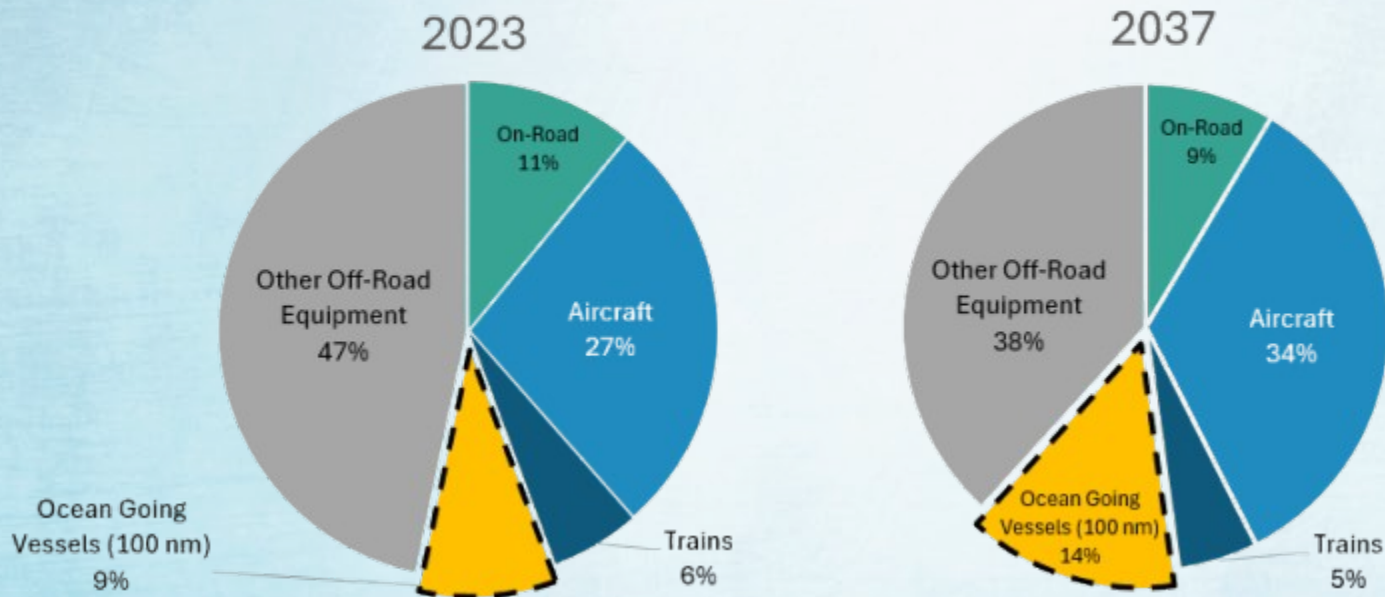


- Ocean-going vessels (OGV) are one of the largest contributors of air pollution in California
- NO<sub>x</sub> reductions essential to help South Coast Air Basin reach attainment of National Ambient Air Quality Standards



# 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 (NO<sub>x</sub>, PM), air toxic contaminants (DPM), and GHGs
- NO<sub>x</sub> 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.

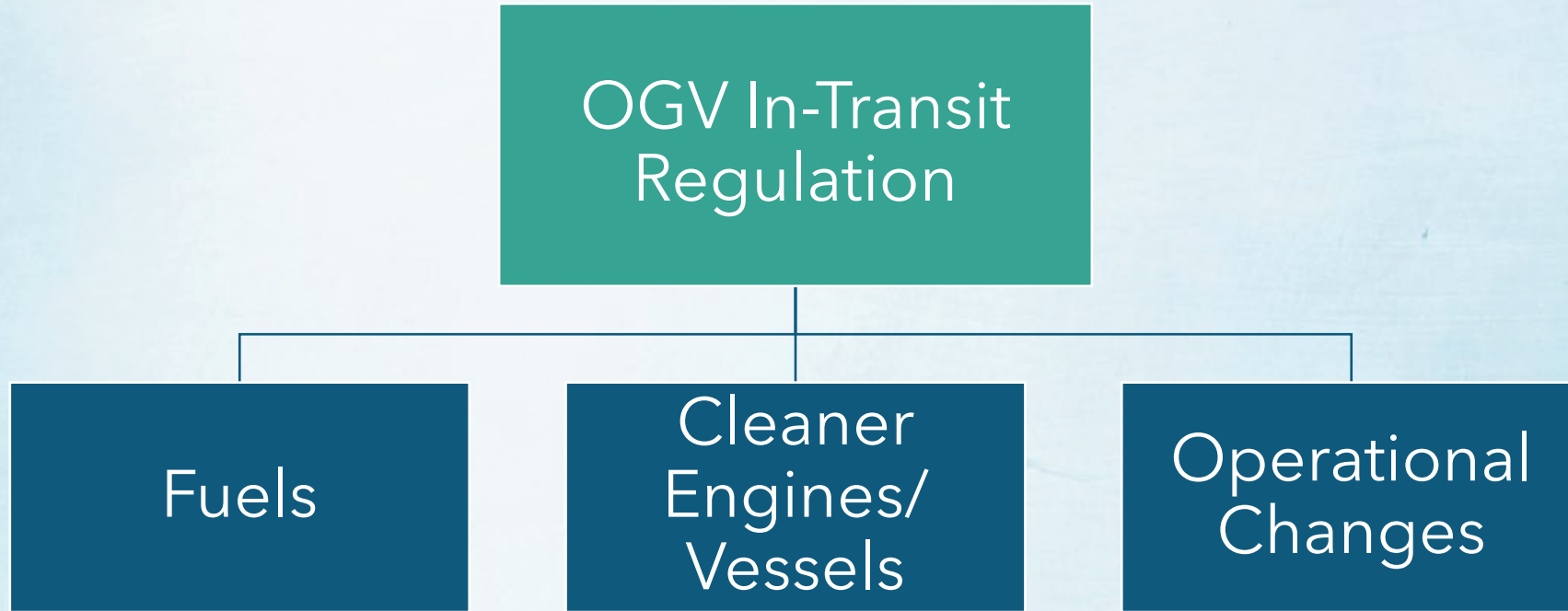


# Regulation Development Timeline



- 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-ogv-transit-regulation>
- Email our inbox at: [OGVintransit@arb.ca.gov](mailto: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 as:
  - Technology readiness
  - Timelines for market readiness of new technologies/fuels
  - New technologies/fuels not discussed in UCI presentation
- Please send feedback by February 20<sup>th</sup>
- Send to CARB directly via the In-Transit inbox:  
[OGVintransit@arb.ca.gov](mailto:OGVintransit@arb.ca.gov) and Cc UCI: [jgreed@uci.edu](mailto:jgreed@uci.edu),  
[mcdonell@ucicl.uci.edu](mailto:mcdonell@ucicl.uci.edu)