



Freight Days

June 8, 2021

Listening to Language Interpretation

1. In your meeting/webinar controls, click **Interpretation**. It can be located at the bottom of the screen.
2. Click the language that you would like to hear. For this meeting, you will have English and Spanish as your options.
3. To only hear the interpreted language, click **Mute Original Audio**.

Windows | macOS

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2. Click the language that you would like to hear.



3. (Optional) To hear the interpreted language only, click **Mute Original Audio**.

Listening to Language Interpretation

- Please call our Spanish Conference Line if you are unable to access the simultaneous translation.

Spanish Conference Call
Number:

(866) 803-2146

Passcode:

1083550

Before We Get Started

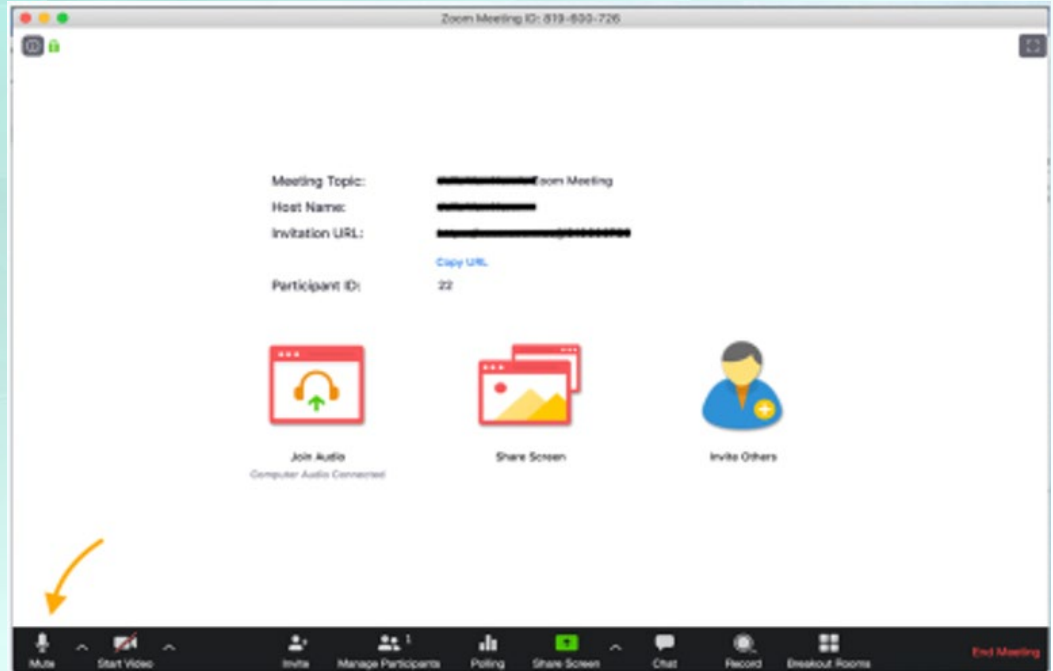
- Please **mute yourself** and make sure your name is showing as your screen name
- To **rename**, click on the top right side of your picture/video
- Use this naming convention, **First Last- Affiliation** (e.g. Jane Doe- CARB)
 - **Community Organization / Agency / Air District / Company / etc.**
- **Need help?** Use the Chat function to request assistance

Zoom Orientation

Mute/Unmute

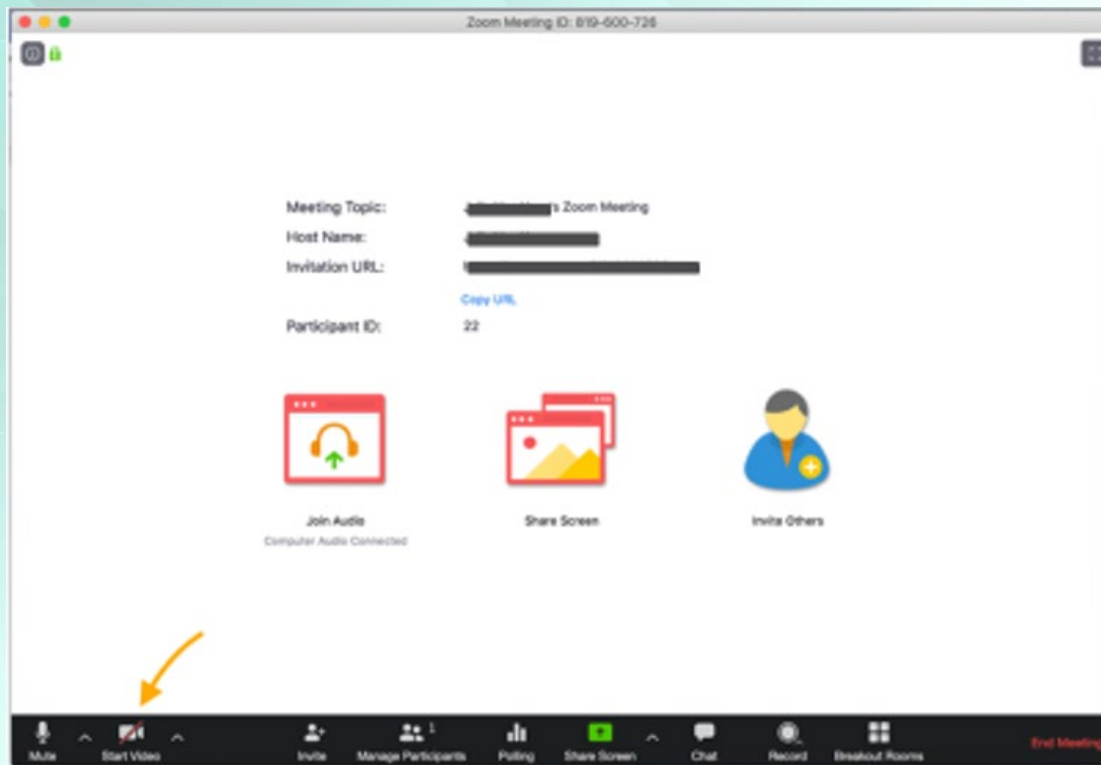
Please remain on mute unless your name has come up in the speaking queue

- Zoom: **Mute/Unmute** button at the bottom left
- Phone: Dial *6 to mute/unmute



Video

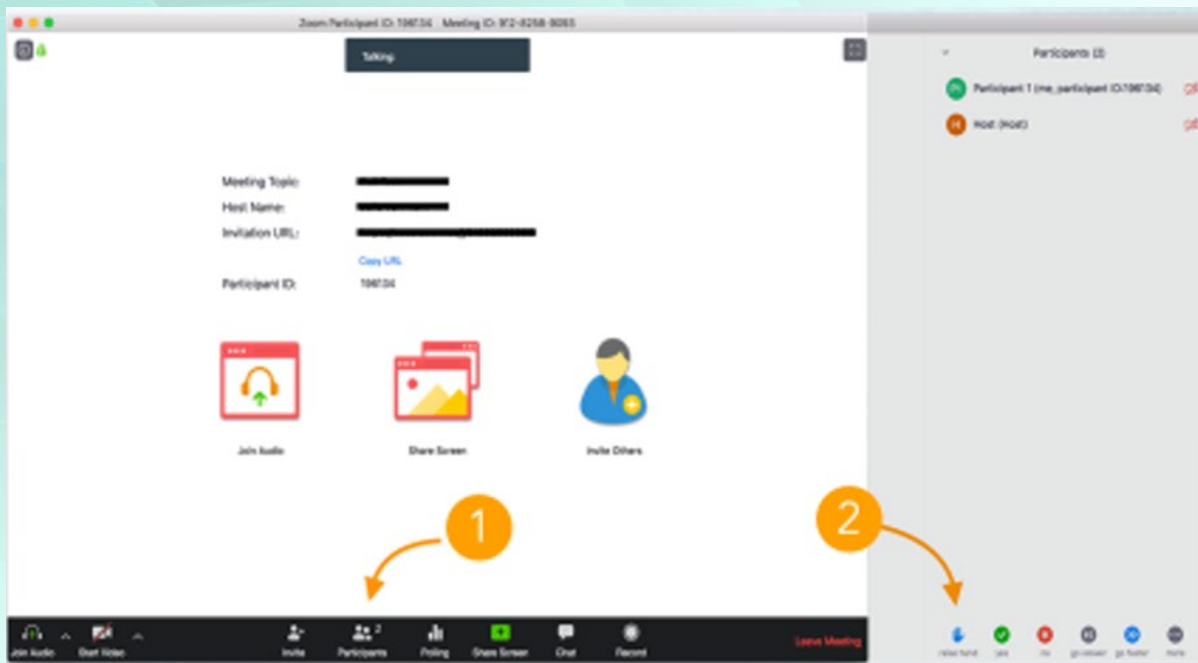
Click the camera icon at the bottom left of your screen to toggle your video on and off.



Raise Hand

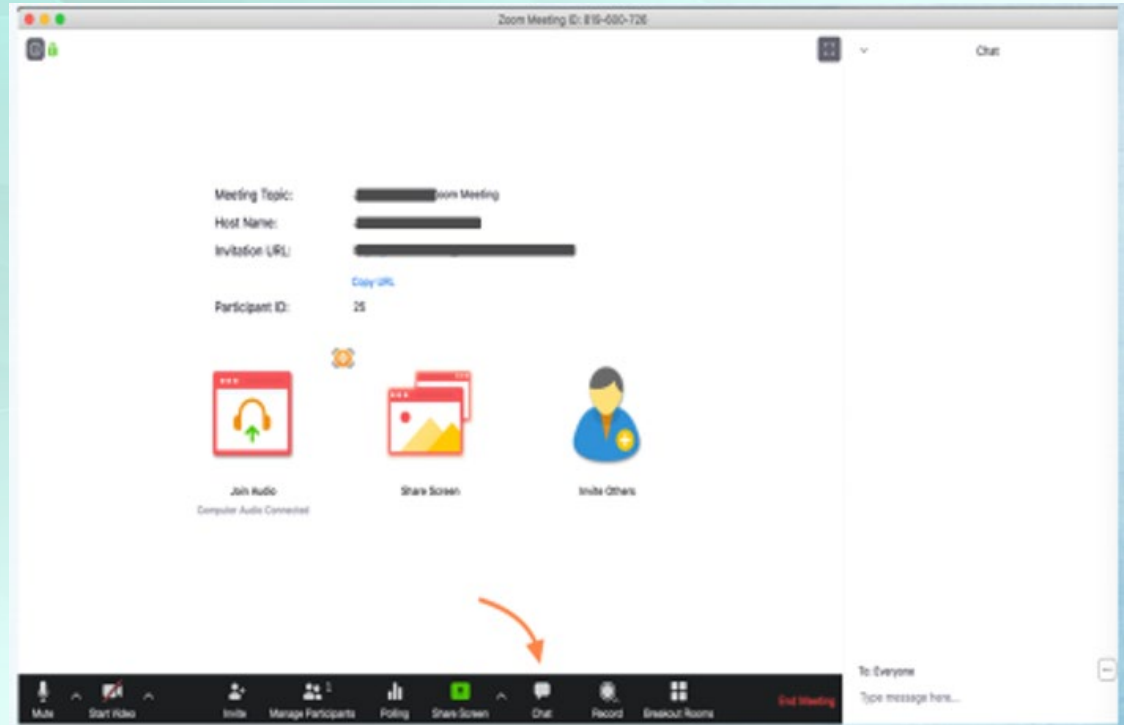
To be added to the speaking queue, please use **Raise Hand**

- Zoom: Click **Participants**, then **Raise Hand**.
- Phone: dial *9
We'll check in with the phone line periodically.



Chat

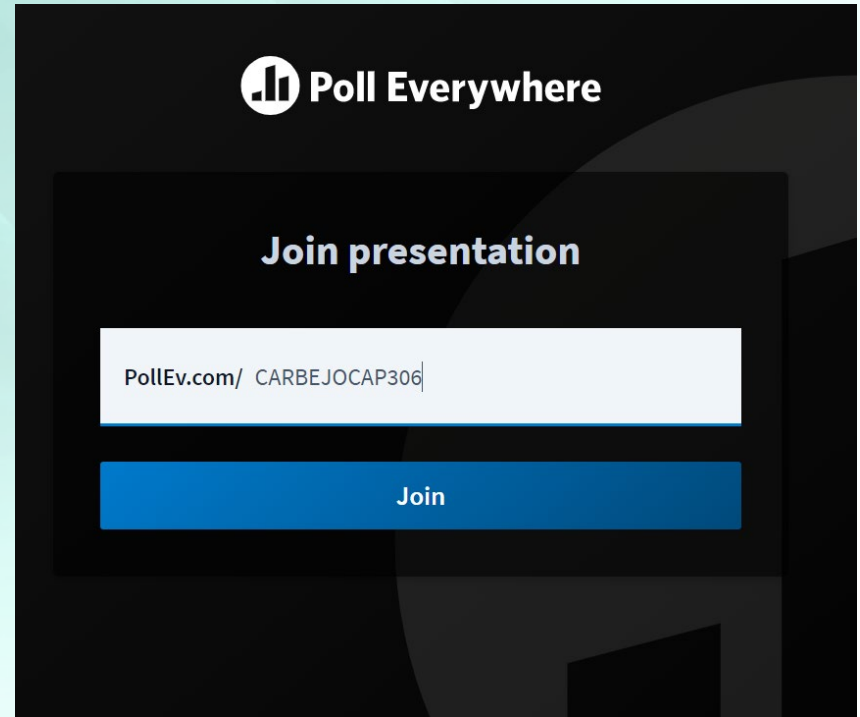
Click on the **chat** icon near the center bottom of your screen. You can choose to chat with the Host or Co-host in a “private” chat. Private chats are archived.



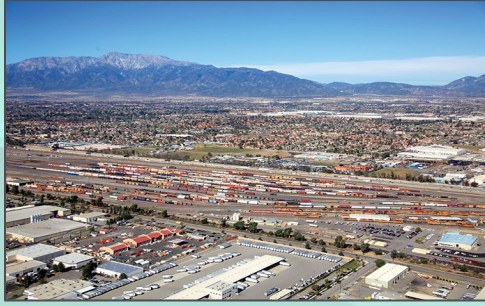
Poll Everywhere

Go to PollEv.com/home and enter the username: "CARBEJOCAP306" and select Join.

Or text "CARBEJOCAP306" to 22333.



The screenshot shows the Poll Everywhere website interface. At the top, there is a logo consisting of three vertical bars of increasing height inside a circle, followed by the text "Poll Everywhere". Below the logo, the text "Join presentation" is displayed. Underneath, there is a white input field containing the text "PollEv.com/ CARBEJOCAP306". Below the input field is a blue button with the text "Join".



Freight Day - Seaports

June 8, 2021

What are Seaports?

- Seaports are freight hubs where cargo is moved on/off ships to truck/rail
- California has 11 public seaports and numerous private marine terminals
- Seaports are vital to California's economy - but they also impact the health of those living and working in and around them



Freight Sources Impact Seaport Communities



~1/2 of air pollution, ~1/3 of economy/jobs

Freight Impacts on Health:

- Elevated cancer risks in communities near hubs
- Largest contributor to unhealthy levels of regional fine particulate and ozone pollution
- Premature death, cardiac and respiratory disease

Seaport Freight Emissions Sources



Ocean-Going Vessels



Drayage trucks



Transport Refrigeration Units



Commercial Harbor Craft



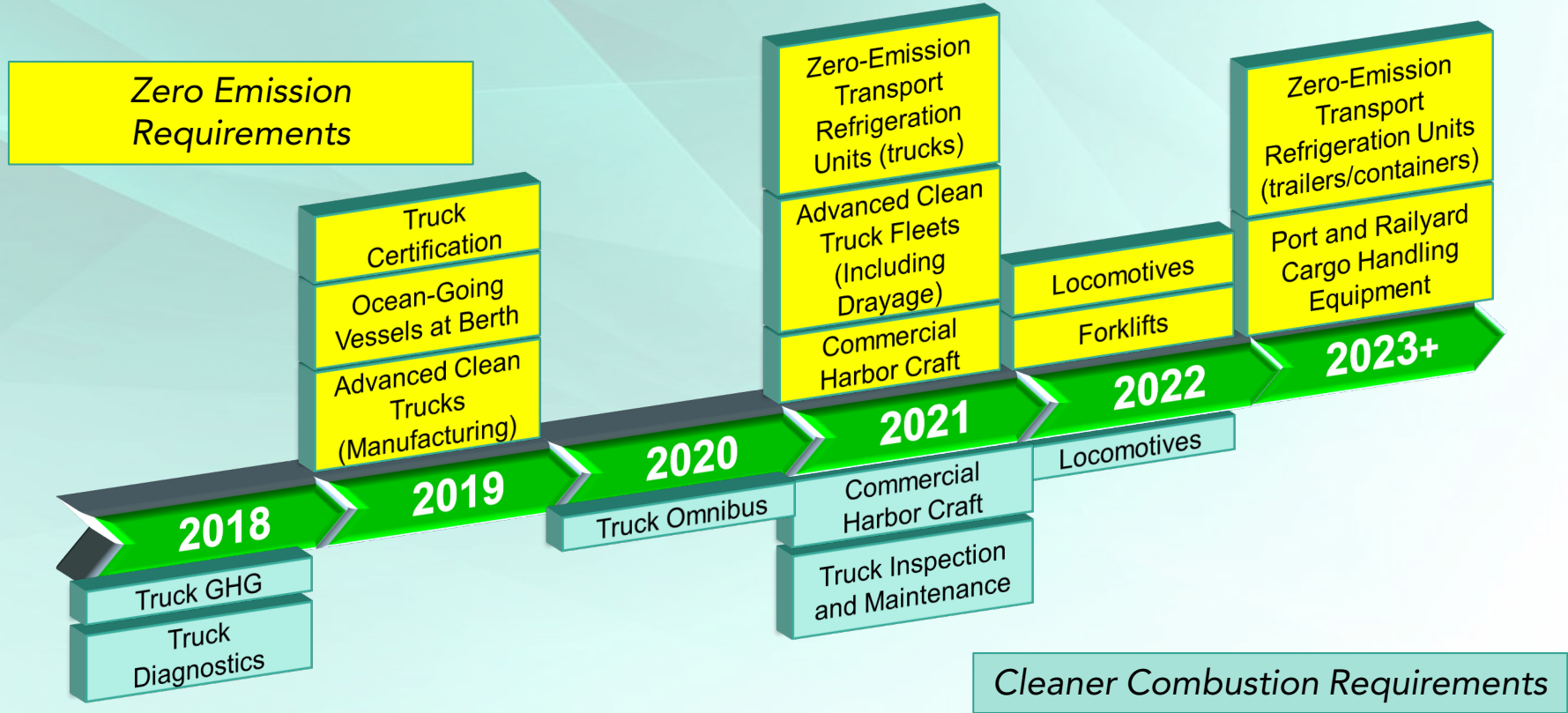
Locomotives



Cargo Handling Equipment

New CARB Freight Regulatory Actions

(1st Board hearing dates shown)



Public Engagement

- Workshops
- Community meetings
- Meetings with CARB staff
- Comment letters
- Board hearings



Contact Us

Transportation and Toxics Division

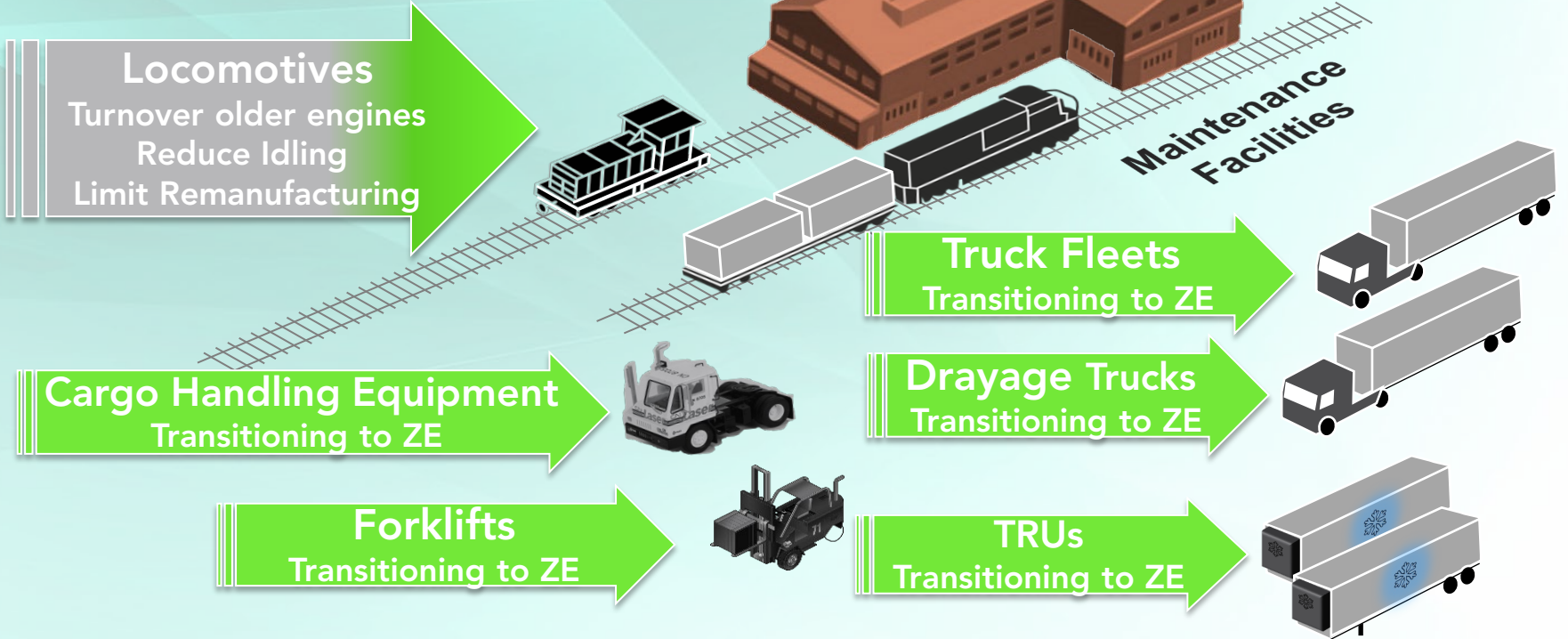
Ocean-Going Vessels	Website(s): https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessel-fuel-regulation Email: Nicole.LightDensberger@arb.ca.gov
Drayage Trucks	Website: https://ww2.arb.ca.gov/our-work/programs/drayage-trucks-seaports-railyards Email: Jessica.Johnston@arb.ca.gov
TRU	Website: https://www.arb.ca.gov/diesel/tru/tru.htm Email: Lea.Yamashita@arb.ca.gov
Commercial Harbor Craft	Website: https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft Email: Firas.Abu-Sneneh@arb.ca.gov
Locomotives	Website: https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california Email: Layla.Gonzalez@arb.ca.gov
Cargo Handling Equipment	Website: https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment Email: Firas.Abu-Sneneh@arb.ca.gov



Freight Day: Railyards

June 8, 2021

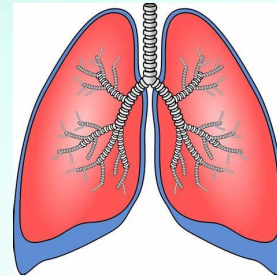
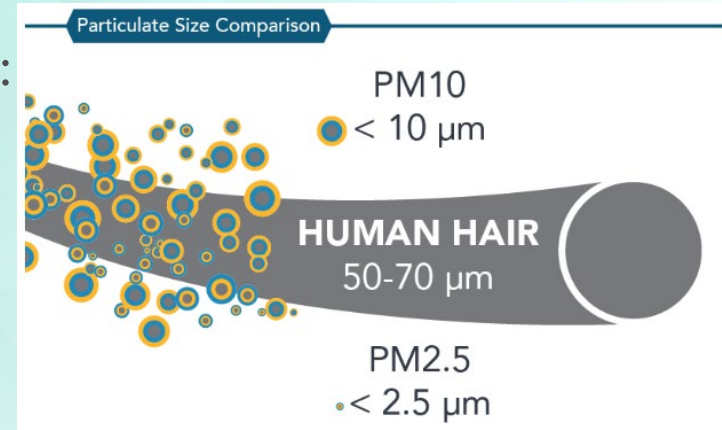
Railyard Equipment



Health Risks and Impacts

Exposure to diesel exhaust/PM2.5 can lead to:


- Acute respiratory symptoms
- Asthma exacerbations; emergency room visits for asthma
- Bronchitis; chronic obstructive pulmonary disease (COPD)
- Heart attacks
- Nervous system effects (e.g., cognitive deficits)
- Lost workdays
- Premature death
- Increased risk for cancer



Governor's Executive Order N-79-20

- Directs CARB to develop and propose strategies to achieve 100% zero-emission from off-road vehicles and equipment operations in the State by 2035 where feasible.

 **100% ZEV sales** by 2035

Full transition to
ZEV short-haul/drayage trucks 
by 2035

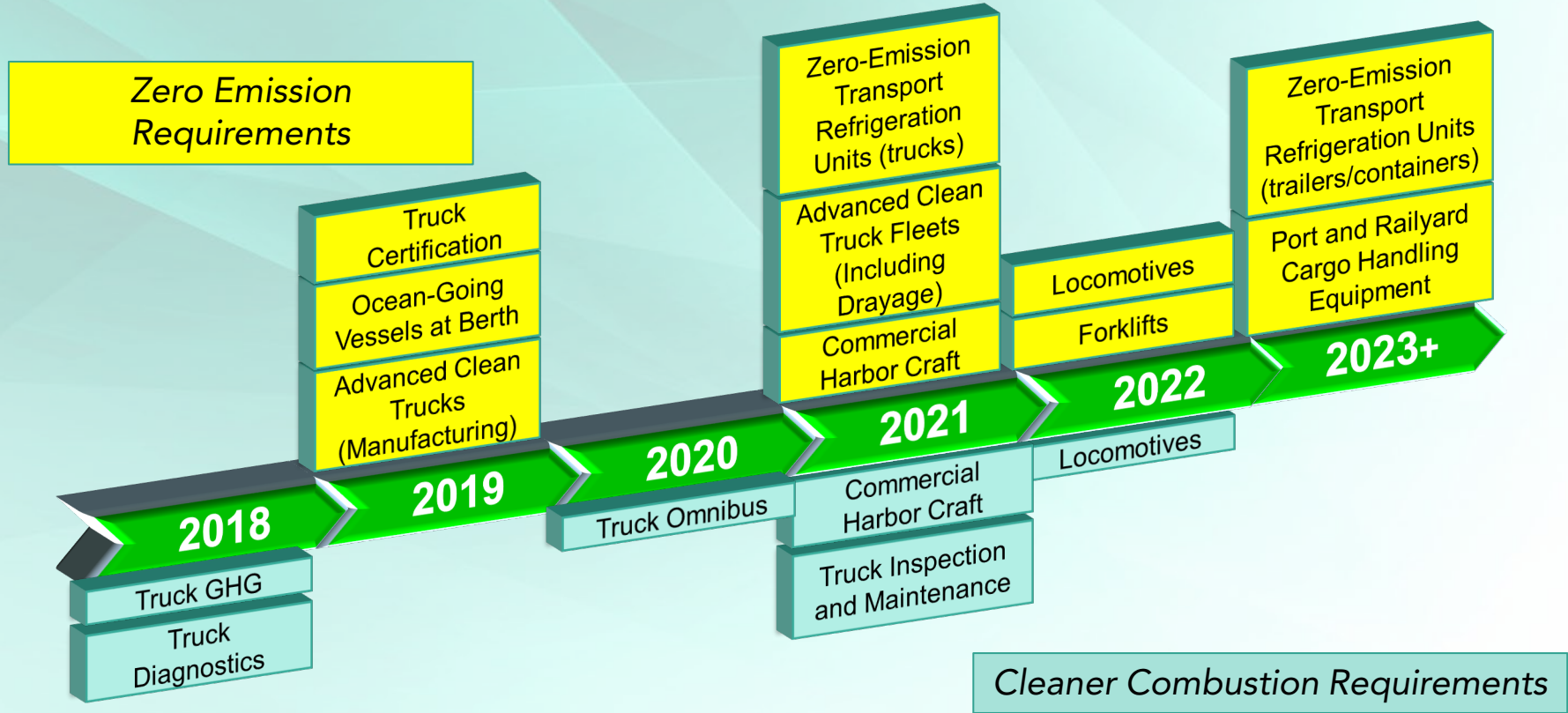
Full transition to **ZEV buses & heavy-duty long-haul trucks**  
by 2045*

Full transition to
ZE off-road equipment
by 2035*

*where feasible

New CARB Freight Regulatory Actions

(1st Board hearing dates shown)



How to Get More Information

- Email – Freight@arb.ca.gov
- CARB Sustainable Freight Transport Website:
<https://ww2.arb.ca.gov/our-work/programs/sustainable-freight-transport>



Freight Day: Freight at California-Mexico Land Ports of Entry

June 8, 2021

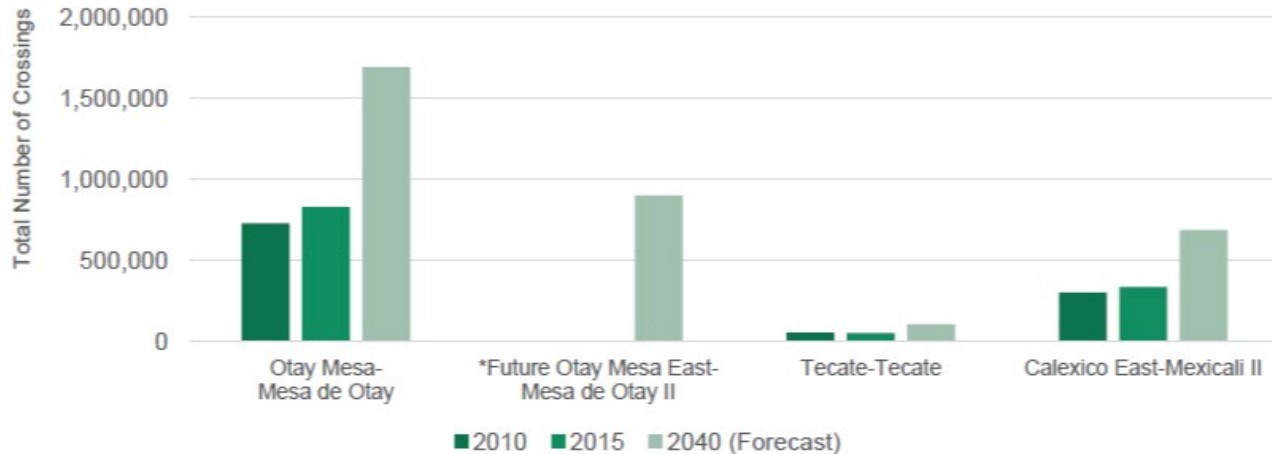
Truck Activity at Land Ports of Entry



Border Ports of Entry



California-Mexico Border Annual Truck Crossings

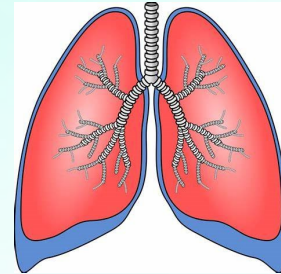
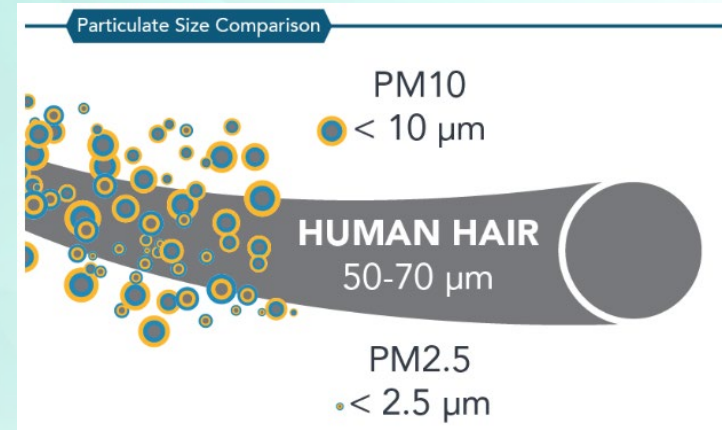


Source: U.S. Department of Transportation, Bureau of Transportation Statistics (2010, 2015); BMP Ad Hoc Task Force (2040)

~1/2 of truck emissions are from idling in queue

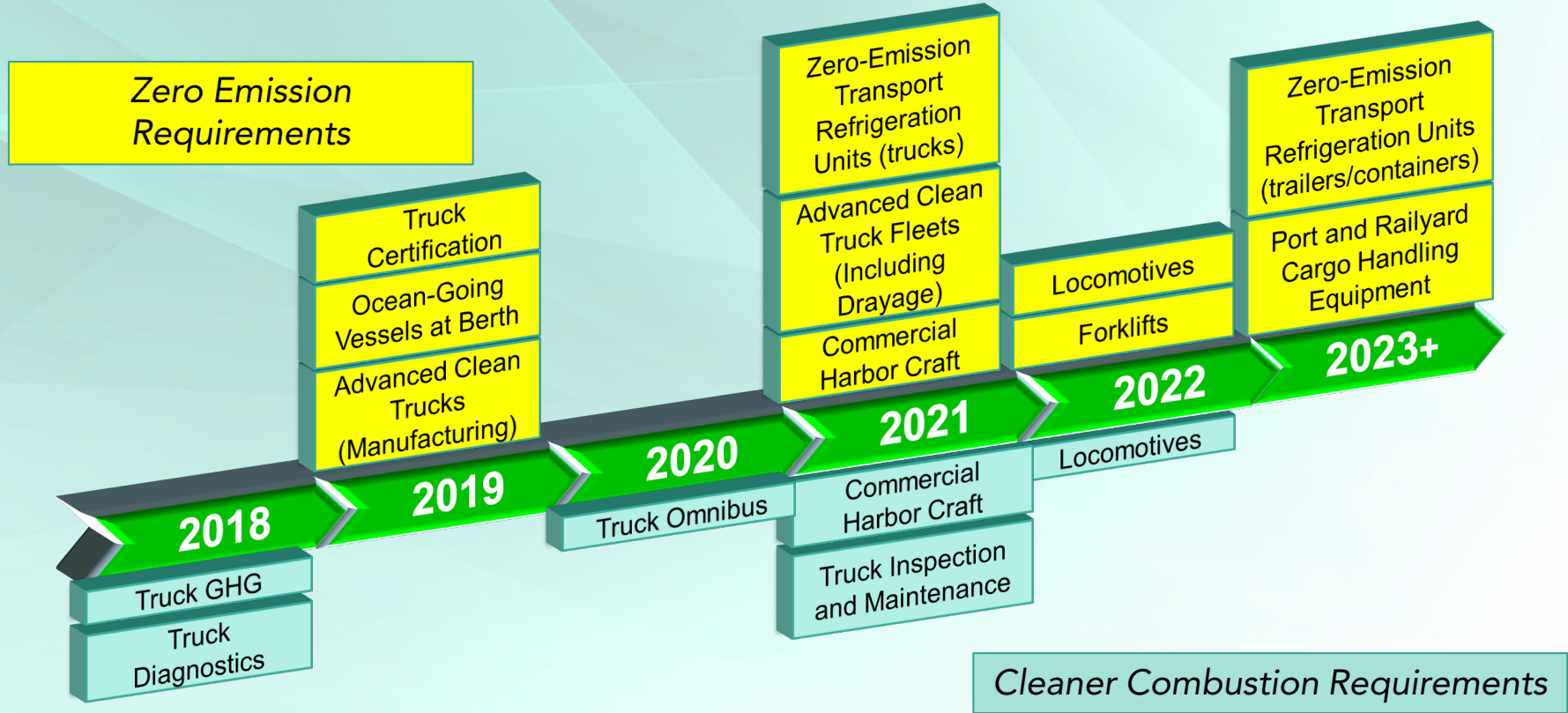
Health Impacts of PM_{2.5}

- PM_{2.5} health effects are widely studied. Exposures lead to:
 - Acute respiratory symptoms
 - Asthma exacerbations, ER visits for asthma
 - Bronchitis, chronic obstructive pulmonary disease (COPD)
 - Heart attacks
 - Nervous system effects (e.g., cognitive deficits)
 - Lost workdays
 - Premature death
- The Children's Health Study found reduced lung development from high PM_{2.5} levels.



New CARB Freight Regulatory Actions

(1st Board hearing dates shown)



How to Get More Information

- CARB Email – Freight@arb.ca.gov
- CARB Website – <https://ww2.arb.ca.gov/our-work/programs/sustainable-freight-transport>
- Otay Mesa Project Info:
<https://www.keepsandiegomoving.com/SR-11-Corridor/SR11-intro.aspx>

Otay Mesa East Land Port of Entry Project

- Caltrans, SANDAG, and other regional entities are working to develop a new Otay Mesa land port facility
- **Facility Purpose:**
 - Alleviate traffic congestion
 - Reduce air pollution impact to nearby communities
 - Support regional economy and international trade

State Route 11/Otay Mesa East Port of Entry Project Features



Additional Slides

Ocean-Going Vessels

New Regulation Adopted in 2020

- Large ships carrying cargo and passengers to/from California ports
 - Ocean-Going Vessels (OGV) include: container, refrigerated cargo, cruise, auto carrier, bulk and general cargo, and tankers
- CARB has two OGV regulations to reduce emissions:
 - Clean Fuel Regulation
 - At Berth Regulation
- Expanded At Berth Regulation begin January 1, 2023



Transport Refrigeration Units

Amendments for Board Considered in 2021

- TRUs are used to control the environment of temperature-sensitive products transported in trucks, trailers, railcars, or shipping containers
- CARB has an existing regulation that requires TRU owners to upgrade to cleaner equipment over time
 - However, most TRUs are still diesel-powered
- Staff are developing amendments to transition truck TRUs to zero-emission



Drayage Trucks

New Regulation for Board Considered in 2021

- Drayage trucks transport cargo in/out of ports and railyards
- CARB's existing drayage truck regulations phase in cleaner Class 7 & 8 trucks through 2023
- Staff are developing a new regulation that would require any truck added to the CARB Drayage Truck Registry to be zero-emission starting in 2023
- All drayage trucks would be required to be zero-emission by 2035



Proposed Zero-Emission Forklift Regulation

New Regulation for Board Consideration 2022

- Purpose: developing a measure that would accelerate the transition to zero-emission (ZE) forklifts within fleets throughout the state in order to reduce air pollution, improve air quality, and combat climate change.
- Applicable to forklifts in which a ZE option is readily available, up to 12,000lbs. lift capacity
- Next workgroup: early June 2021
- Proposed full implementation by 2038
- Webpage: <https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts>



Locomotives

New Regulation for Board Consideration in 2022



- No current California regulation for locomotives
- A California regulation is needed to provide emissions reductions in rail communities
- CARB staff regulatory concepts (still in development):
 - Develop a “spending account” to help operators purchase cleaner equipment
 - Prevent locomotives from idling for more than 30 minutes beginning in 2023
 - Ban locomotives older than 23 years in California as of 2030
 - Increase reporting (by Air District)

Commercial Harbor Craft (CHC)

Amendments for Board Considered in 2021

- Commercial harbor craft (CHC) include: ferries, tugboats, barges, and other diesel-powered commercial vessels
- Existing regulation has accelerated turnover to cleaner engines and requires CARB ultra-low sulfur diesel
- New regulation could begin in 2023, requiring cleaner engines, expansion to more vessels/engines, and use of shore power at dock
 - Zero-emission requirements are being considered where available



Cargo Handling Equipment

Amendments for Board Consideration in 2023

- Move containers and freight at seaports and railyards
- Existing cargo handling equipment (CHE) regulation require in-use and newly purchased diesel-powered equipment at ports and intermodal rail yards
- CARB staff is developing concepts for a new regulation to move towards zero emissions



RTG Cranes



Top Picks



Side Picks



Yard Trucks



Reach Stackers



Forklifts



Bulk Equipment