



Virtual Listening Session: Increasing Access to Clean Transportation


June 29, 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:

(888) 363-4734

Passcode:

5145736

Before We Get Started

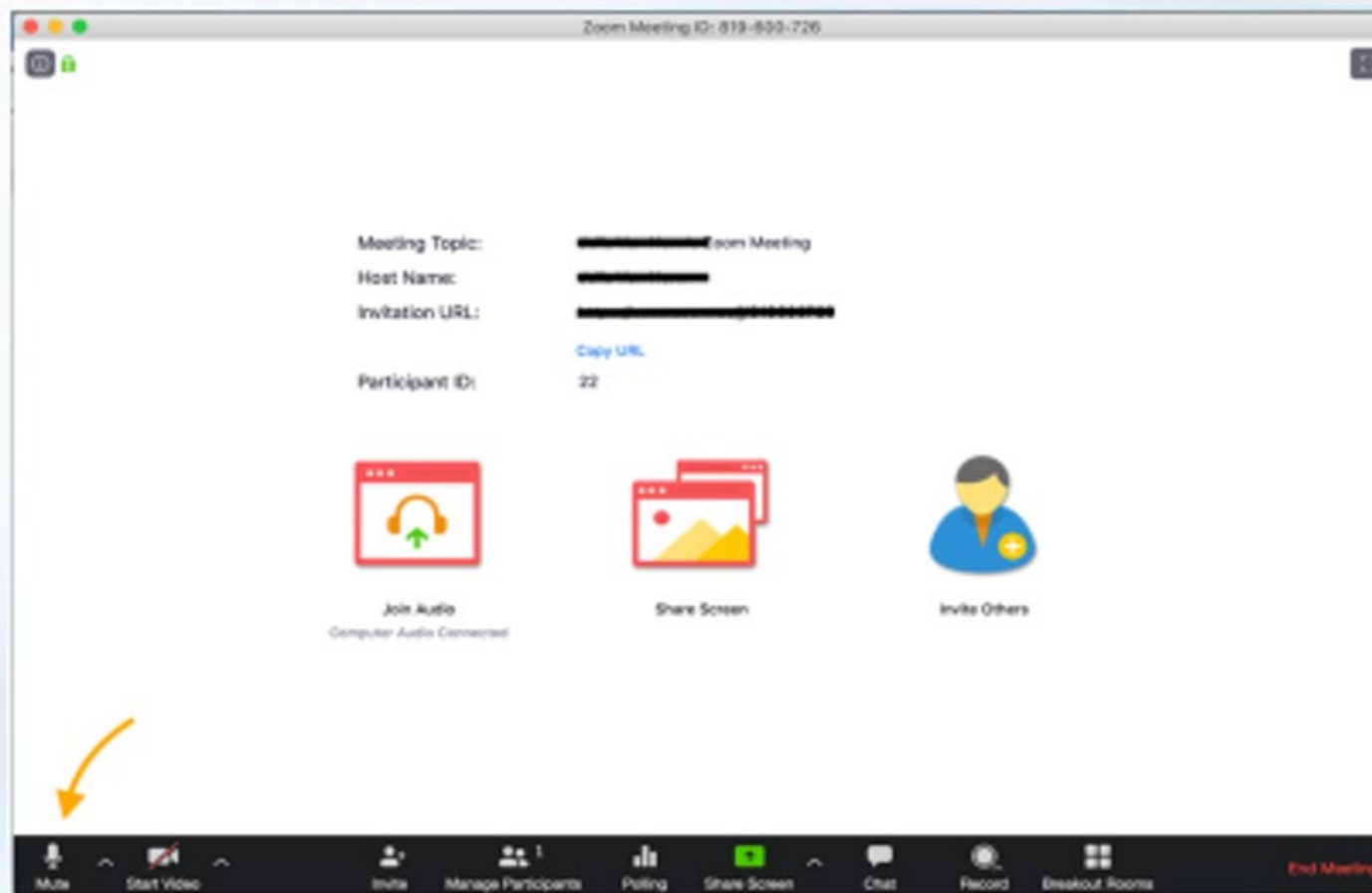
- Please **mute yourself** and make sure your name is showing as your screen name
- To **rename**, click on the top right side of your picture/video
- Use this naming convention, **First Last- Affiliation** (e.g. Jane Doe- CARB)
 - **Community Organization / Agency / Air District / Company / etc.**
-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

Zoom Orientation

Mute/Unmute

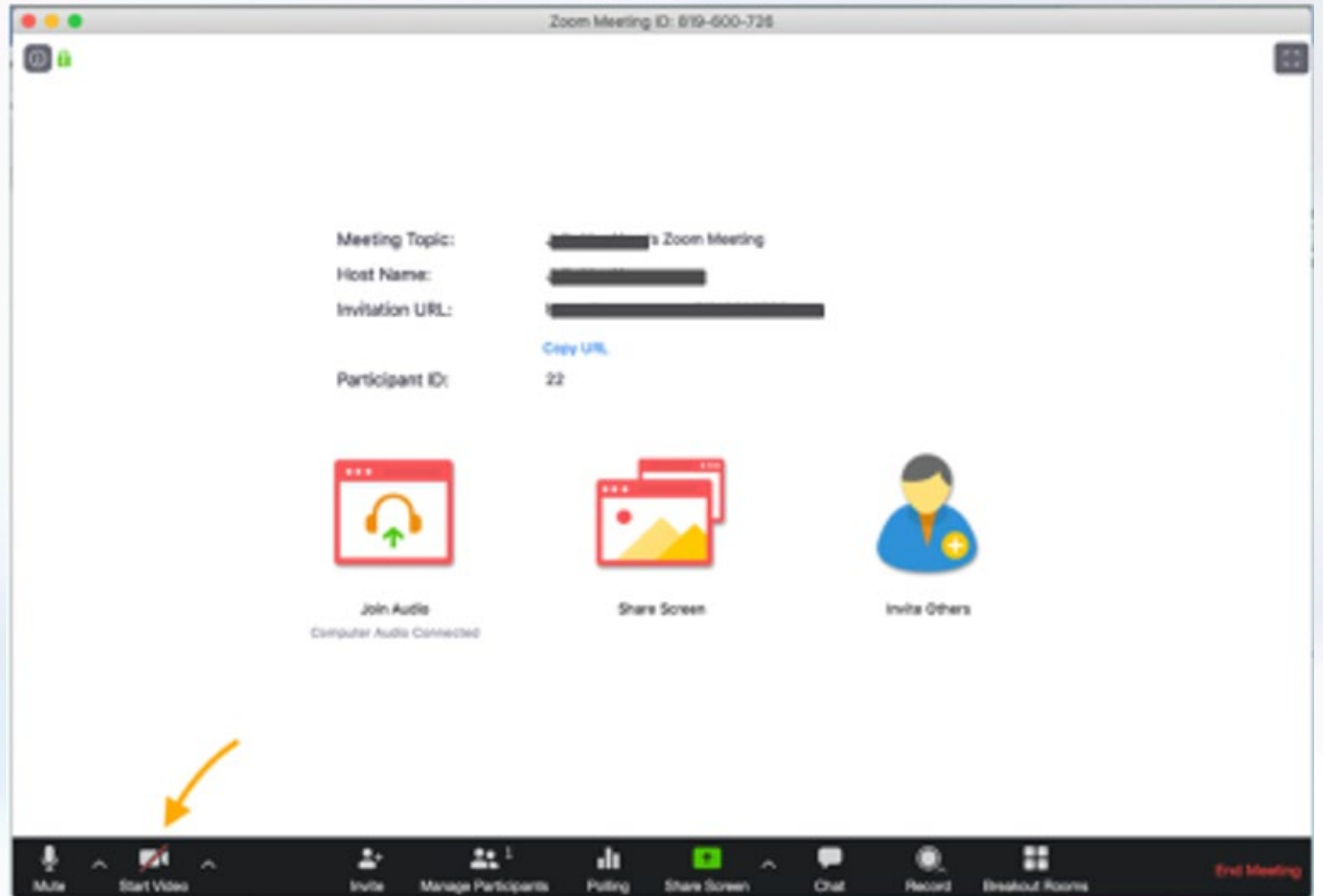
Please remain on mute unless your name has come up in the speaking queue

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



Video

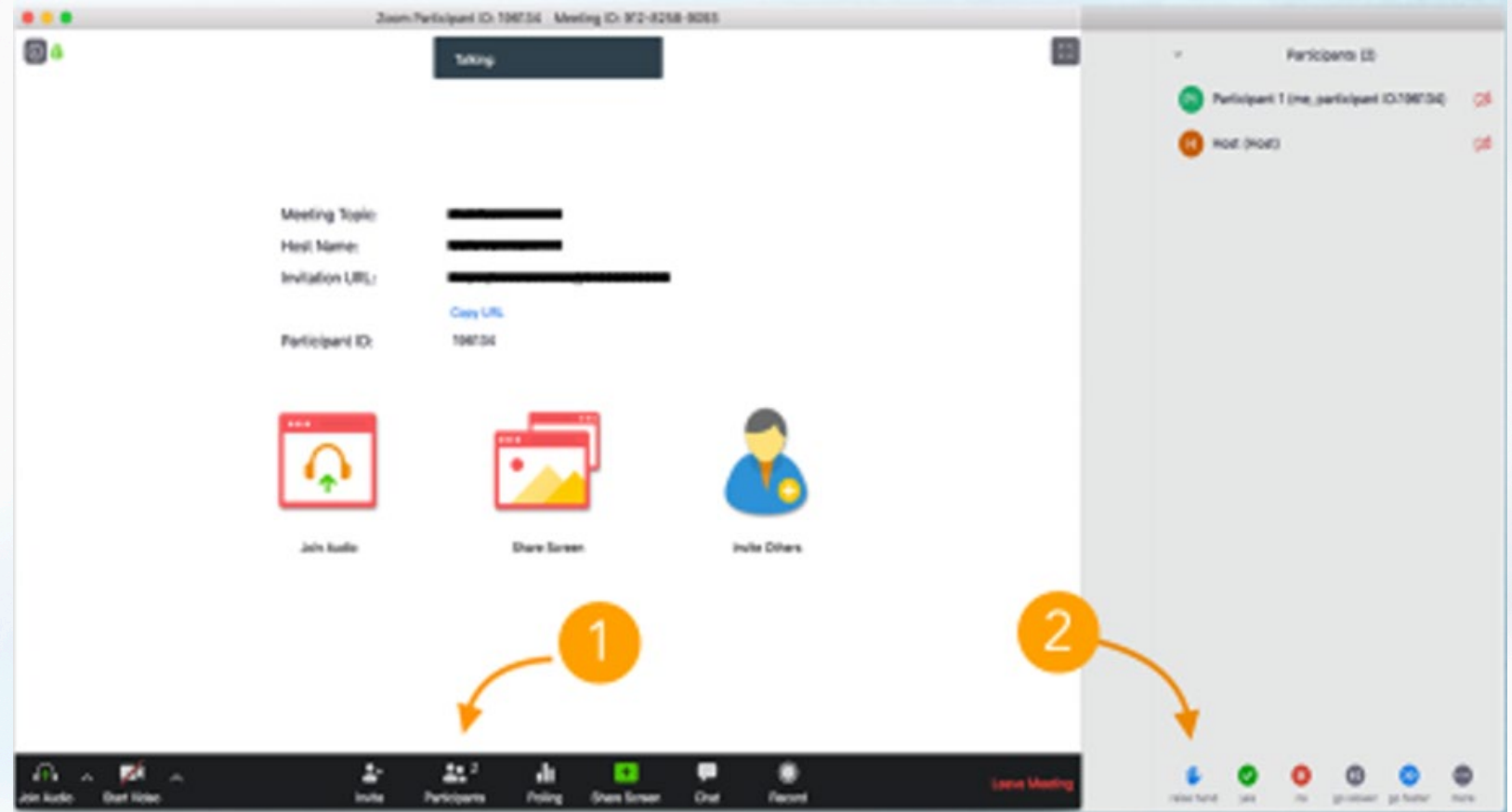
Click the camera icon at the bottom left of your screen to toggle your video on and off.



Raise Hand

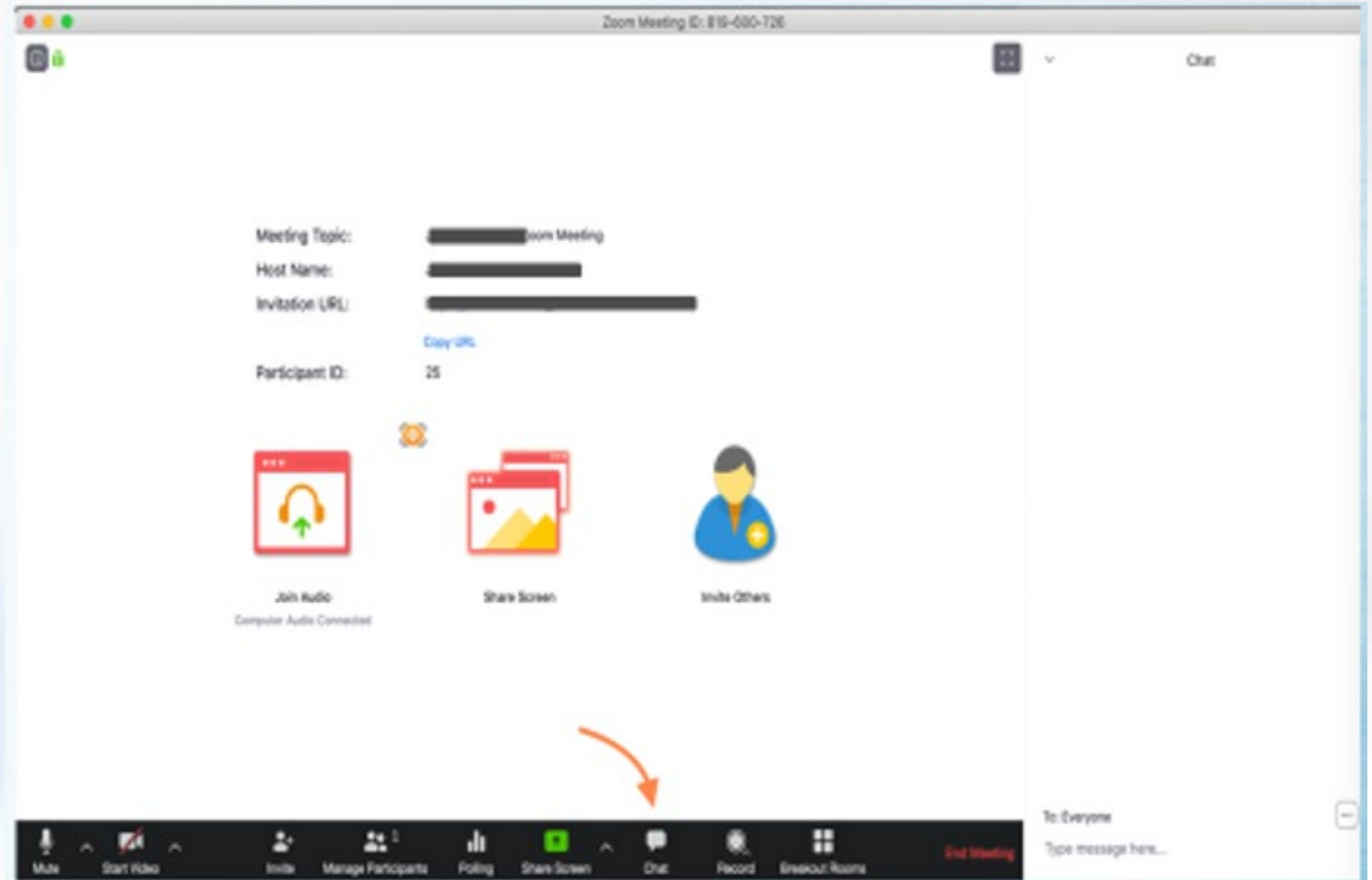
To be added to the speaking queue, please use **Raise Hand**

- Zoom: Click **Participants**, then **Raise Hand**.
- Phone: 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.





Ensuring zero emission vehicles benefit all Californians

June 29th, 2021

Tyson Eckerle
Governor's Office of Business &
Economic Development (GO-Biz)



ZEV Strategy Overview

Why ZEVs Matter



How we get there matters



Economic Impact

Sep 30, 2020, 07:20am EDT | 4,083 views

Why Electric Vehicles Will Likely Emerge As California's Top Manufacturing Export In 2020

Energy Innovation: Policy and Technology Contributor ©

17 ZEV
Manufacturers;
34 including
infrastructure



They Did.

1. **ADOMANI, Inc.**
Corona, CA
2. **BYD Motors**
Lancaster, CA
3. **Complete Coach Works**
Alameda, CA
4. **Efficient Drivetrains, Inc.**
Milpitas, CA
5. **El Dorado National California**
Riverside, CA
6. **Faraday Future**
Los Angeles, CA
7. **Gillig**
Livermore, CA
8. **GreenPower Motor Company**
Porterville, California
9. **Karma Automotive**
Irvine, California

10. **Lucid Motors**
Newark, CA
11. **Motiv**
San Francisco, CA
12. **Phoenix Motorcars**
Ontario, CA
13. **Proterra, Inc.**
Burlingame, CA
14. **Tesla Motors, Inc.**
San Carlos, CA
15. **Transportation Power, Inc.**
Escondido, CA
16. **Xos**
Hollywood, CA
17. **Zero Motorcycles, Inc**
Scotts Valley, CA



Workforce



- **70,000** = ZEV related manufacturing jobs in CA
- **38,200 - 62,400** = estimated job years to build EV charging infrastructure over the next 10 years.
- **9,100** = job years to build medium and heavy-duty charging infrastructure
- **1,000** full time jobs; **1,000** part time, & **200** construction jobs estimated to support 100 hydrogen stations

Challenge/Opportunity
Increase access to jobs!





Car Pollution Standards and Zero Emission Vehicle Requirements

Marissa Williams

Marissa.Williams@arb.ca.gov

Virtual Listening Session

Clean Car Regulations



1990

**Low-Emission
Vehicle Regulation +
ZEV Requirements**

1998

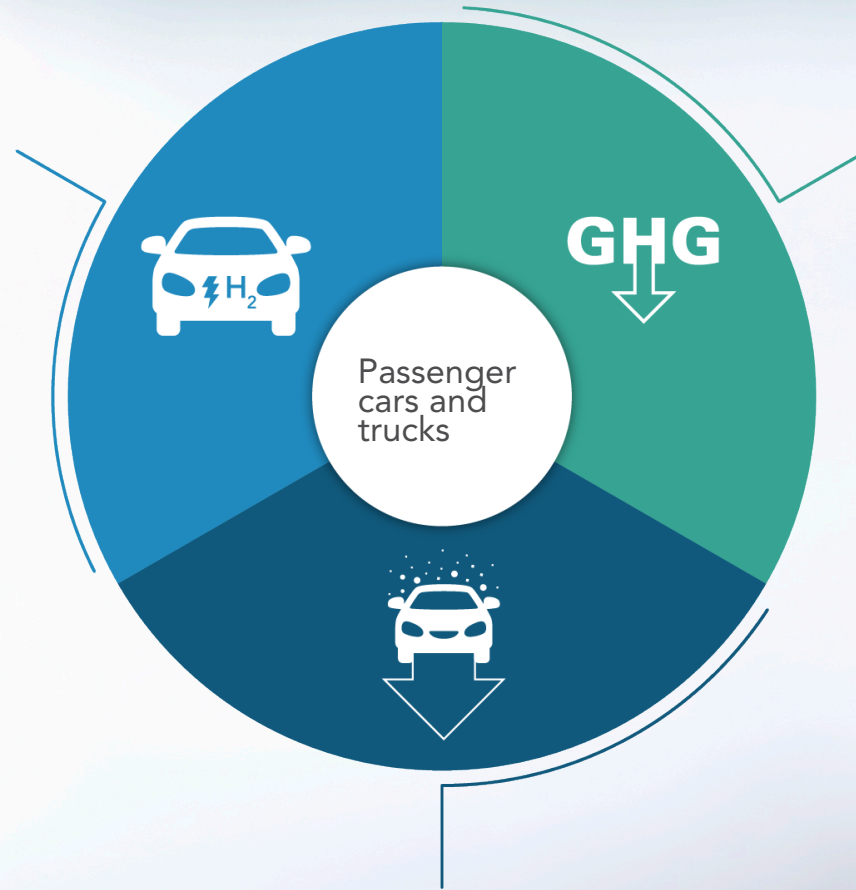
**Low-Emission
Vehicle II Regulation
+ ZEV**

2012

**Advanced Clean Cars
Program
/Regulations**

Zero-Emission Vehicle (ZEV) Regulation

- Accelerates ZEV deployment
- Requires automakers to produce an increasing number of battery-, fuel cell-, and plug-in hybrid- electric vehicles



Low-Emission Vehicle GHG Regulation

- Reduces climate change impacts
- Requires reductions in greenhouse gas emissions from driving and air conditioning usage

Low-Emission Vehicle Criteria Regulation

- Reduces air quality impacts
- Requires tighter controls on smog-forming and particulate matter emissions that cause adverse health impacts



Advanced Clean Cars II Rulemaking

- Continue to clean up gasoline cars
- Ensure emission controls better match driver behavior
- Add standards for heavier passenger trucks
- Increase market share of electric vehicles
- Improve electric vehicles for all consumers





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

For more information,
visit the Advanced Clean Cars Program webpage at:

<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>



Incentive Programs

Raquel Leon
Raquel.leon@arb.ca.gov
Virtual Listening Session

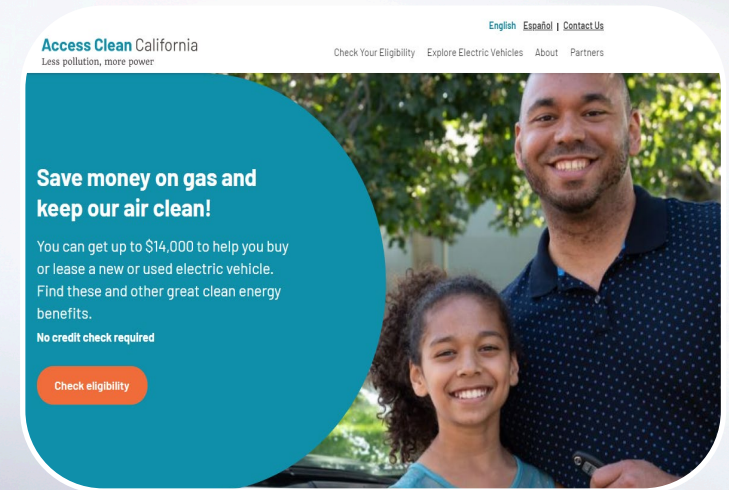
CARB's Light-Duty and Clean Transportation Equity Incentives



Vehicle Purchase Incentives



Clean Mobility Projects



Outreach, Technical Assistance, & Capacity Building

Vehicle Purchase Incentives

CVRP

Rebates for clean vehicles



Financing Assistance
Loans and grants to purchase clean vehicles

Clean Cars 4 All

Incentives to replace old vehicles with clean vehicles in certain air districts



Clean Mobility Projects

Rural School Bus Pilot
Funding for clean school buses



Clean Mobility Options
Funding for clean mobility pilots and newly launched Clean Mobility Options Voucher Pilot

Sustainable Transportation Equity Project
Planning and Implementation Grants



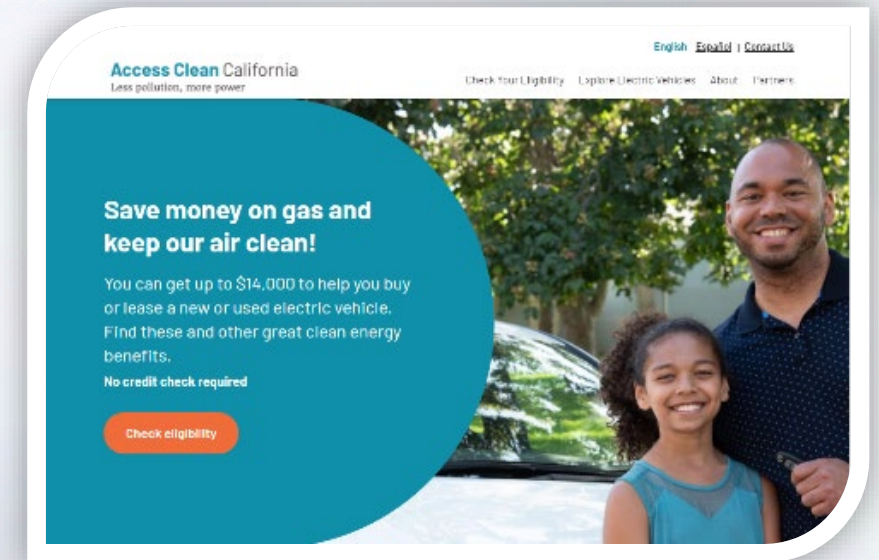
Clean Mobility in Schools
Funding for zero-emission school buses, other school district vehicles, charging infrastructure, and other clean mobility options



Agricultural Worker Vanpools
Clean transportation vanpools for agricultural workers

Outreach, Technical Assistance & Capacity-Building

- Access Clean California
 - Streamlined application platform
 - Partnership network & resource hub
- Transportation needs assessments
 - STEP & CMO
- Technical assistance and capacity-building
 - Application and project development (STEP/CMO)
 - Capacity-building pilot with CBOs



For more information,
visit the Moving California webpage at:
www.arb.ca.gov/movingca



California Energy Commission

Advanced Clean Cars II Listening Session

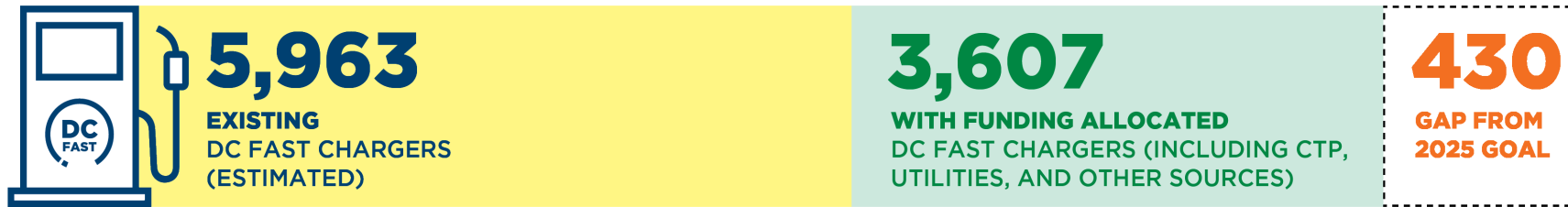
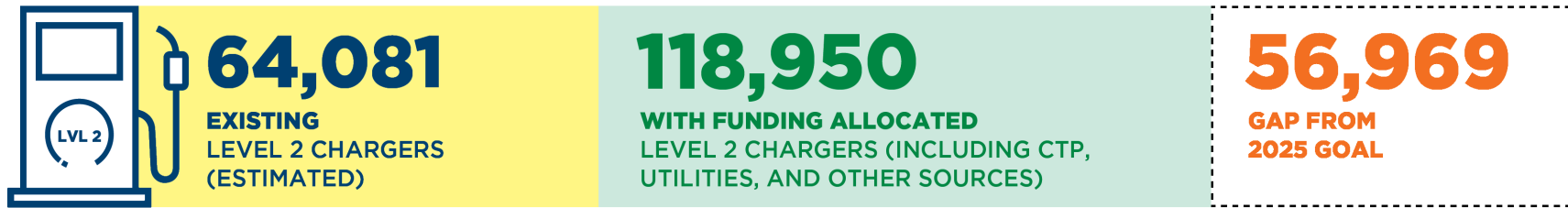
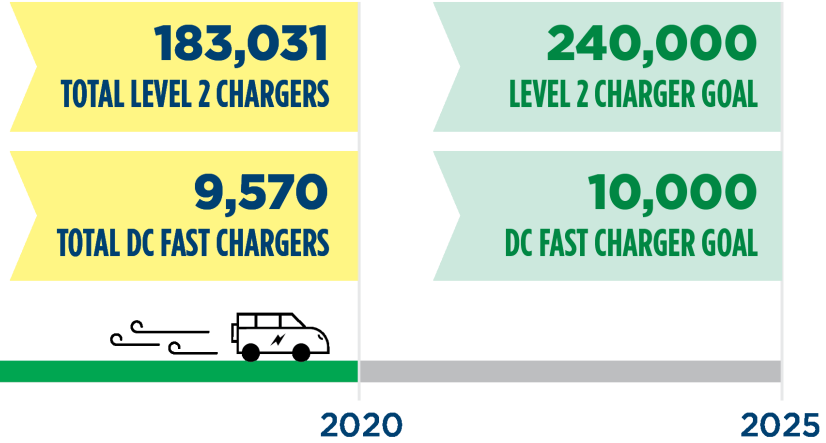
Mark Wenzel, Manager, Advanced Vehicle Infrastructure Office

June 29, 2021



Progress Report

250,000 Chargers by 2025



1,200,000 Chargers by 2030



ZEV Infrastructure Investments

Hydrogen Stations

- 51 open now, goal of 200

Charger Rebates

- \$193 million in CEC funding, \$36 million from local partners

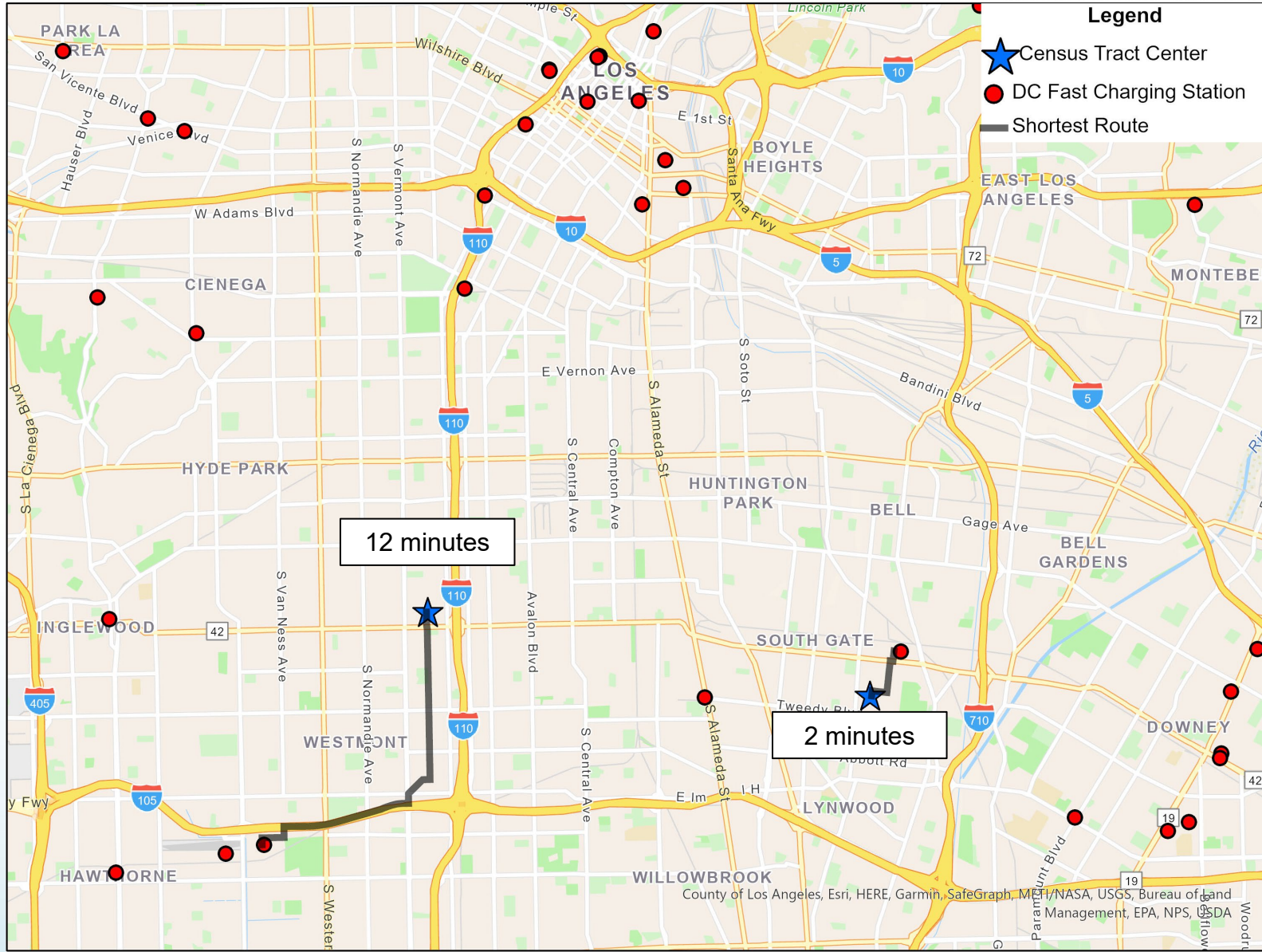
Planning, Innovation

- Blueprints for Local Governments
- Coming this year: Infrastructure to serve:
 - Ridehailing and other on-demand fleets
 - Multi-unit dwelling residents
 - Rural drivers





Measuring Access to Fast Charging with New Drive Time Analysis





Thank you

Mark Wenzel, Manager
Advanced Vehicle Infrastructure Office
Fuels and Transportation Division
California Energy Commission

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California Energy Commission

Advanced Clean Cars II Listening Session

Larry Rillera, Air Pollution Specialist, Transportation and Policy Analysis Office

June 29, 2021

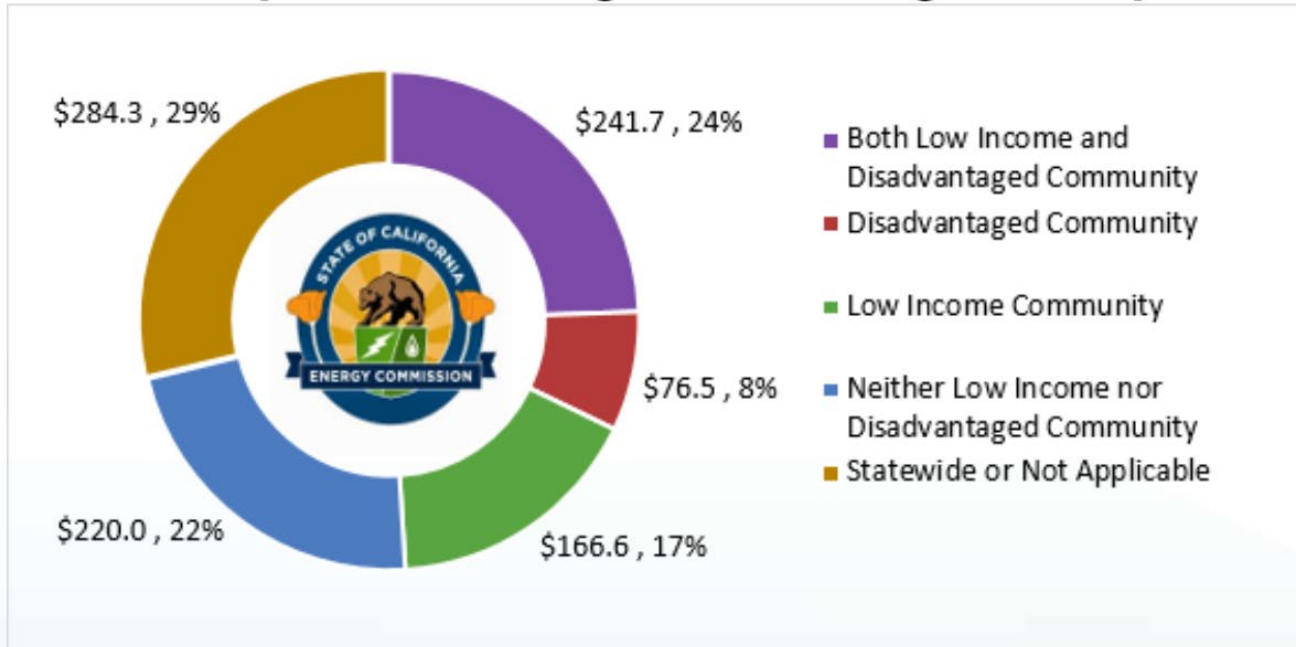


Equity Investments



Investment Results as of April 2021

Clean Transportation Program Funding as of April 2021*



Source: CEC Fuels and Transportation Division staff

49%
Funding in
LIC/DACs

69%
...if excluding
"Statewide or
N/A" investments

*Results subject to change with CES 4.0 update, adding Tribal areas.



Workforce Training and Development

Partnerships

- Employment Training Panel
- Employment Development Department;
- Workforce Development Board
- Community Colleges

Projects

- Transit Training Apprenticeship
- Clean Transportation Pilot Training Project
- Electric School Bus Training Project
- ZEV College Training Project
- ZEV High School Pilot Project
- California Sustainable Freight Workforce Pilot Project
- Zero-Emission Drayage Truck and Infrastructure Pilot Project
- IDEAL ZEV Workforce Pilot Project (Pending)



Advanced Transportation
and Logistics



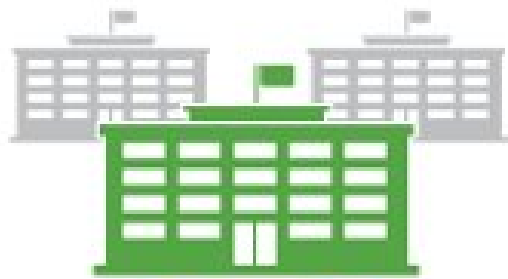


ZEV High School Pilot

Zero Emissions Vehicle High School Pilot Program

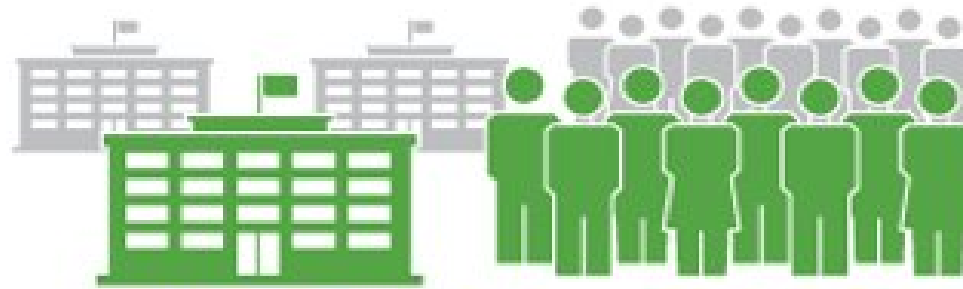
\$2 Million Total Funding

(with augmentation)



28

28 High Schools
Funded



19

19 High Schools
Reporting...

1,800

...Students/Year
Enrolled in Auto Courses
with New EV Curriculum



36

Faculty (High School
and Community College)
Trained to Date



Thank you!

Larry Rillera
Transportation Policy and Analysis Office
Fuels and Transportation Division
California Energy Commission

Larry.Rillera@Energy.CA.gov

Open Discussion Ground Rules

- Be curious, open, patient and respectful
- One person speaks at a time
- Take space/make space
- Avoid jargon, acronyms and industry terms
- Speak from your own experience
- Challenge assumptions
- Take care of yourself (stretch, take bathroom breaks, have a snack)
- Anything else?