

California Environmental Protection Agency

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# 2016 Program Priorities

January 21, 2016

# Outline

- Reflect on 2015 Achievements
- 2016 Priorities and Objectives
- Key 2016 Actions
- Looking Forward

# Reflect on 2015 Achievements

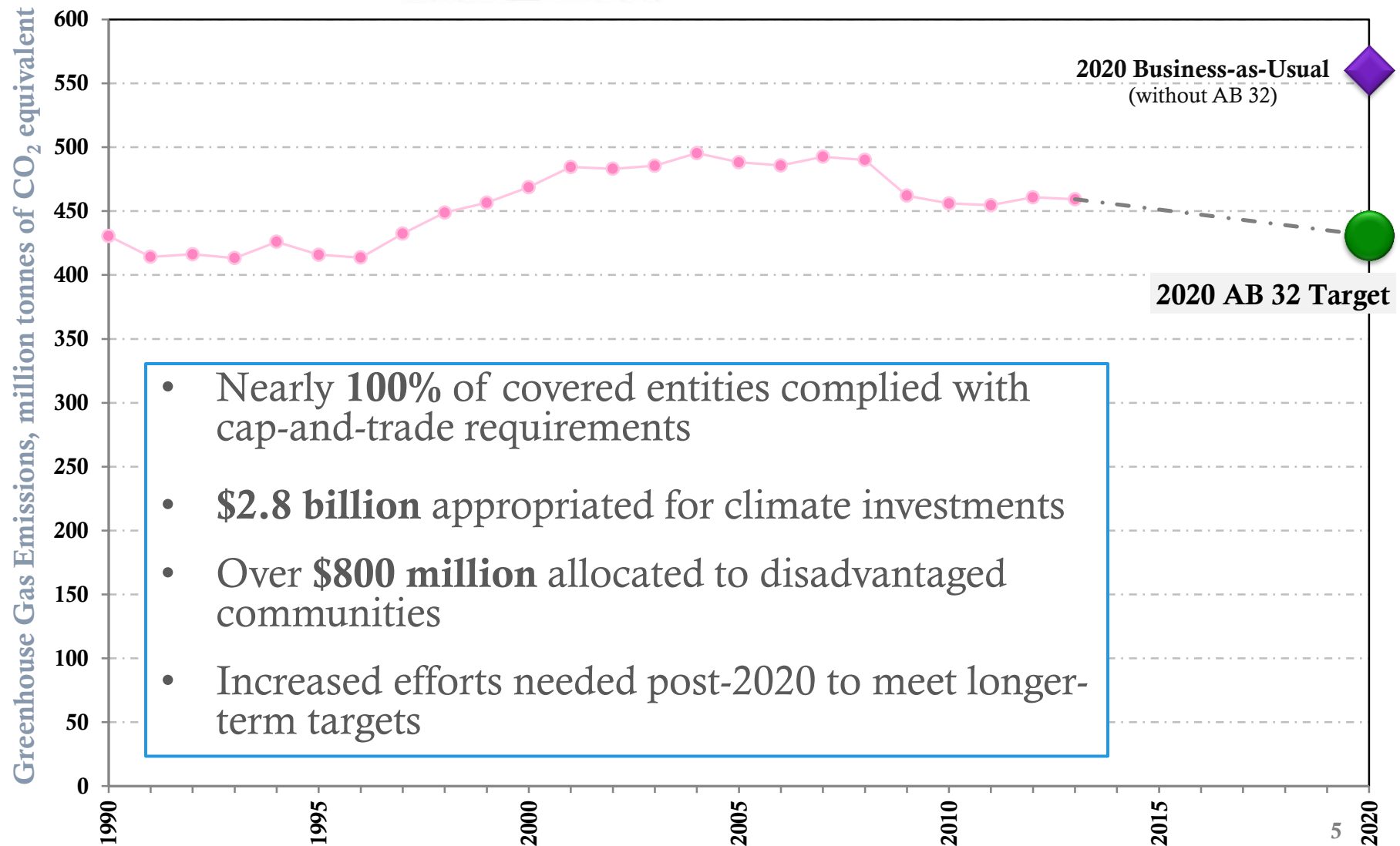


# Continuing Air Quality Accomplishments

- Program implementation further reduced NO<sub>x</sub> by 100 tons per day
- 2 more areas now meet ozone standard
- Continued reduction in air toxics



# On Track to Meet 2020 Climate Commitment



# Growth in Clean Technologies

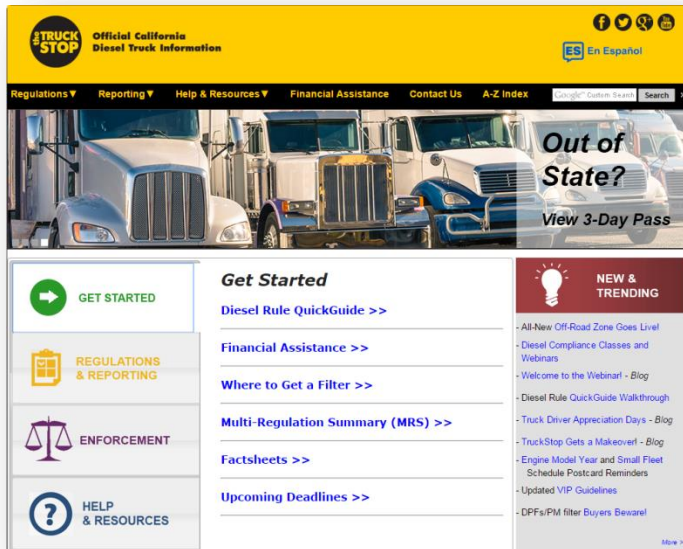
- Nearly 182,000 zero emission vehicles on the road
- Over 8,000 public EV charging stations
- 13 hydrogen fueling stations now operating
- Development of zero-emission heavy-duty technology
- First ultra-low NOx engine certified





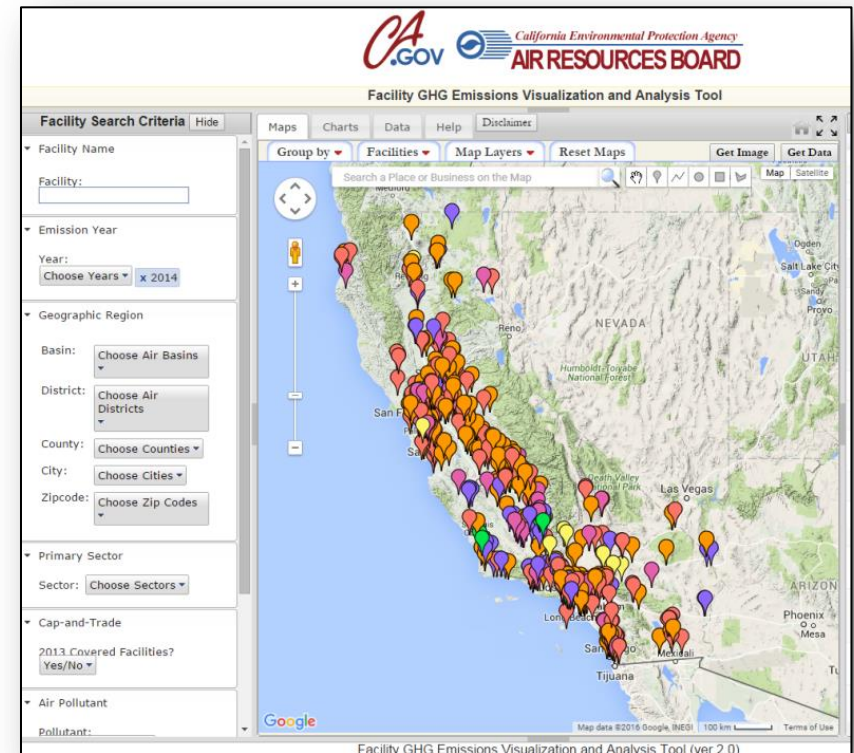
# Strengthened Compliance and Enforcement

- Outreach and enforcement in EJ communities
- Technical and financial assistance



# Expanded Analytical Capabilities

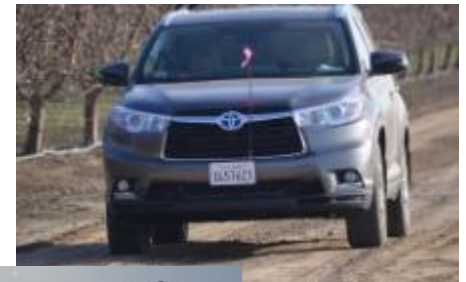
- GHG facility mapping tool
- Technology assessments
- Vision 2.0 model
- EMFAC 2014 model
- Risk assessment guidance and mitigation strategies
- Strengthened economics team





# Enhanced Research and Monitoring Applications

- Expanded GHG monitoring network and mobile measurement capabilities
- Explored low-cost portable sensors for in-house research efforts
- Increased collaboration on aircraft and satellite measurements
- Enhanced emergency response capabilities



# New Leadership Team Members

Todd Sax  
Enforcement Division



Jack Kitowski  
Mobile Source  
Control Division



Emily Wimberger  
Economics Advisor



# Strengthened Partnerships

- Air districts
- Private sector
- Regional and local governments
- State agencies
- State and federal government
- Other nations



# 2016 Priorities and Objectives

A unified vision for transformation

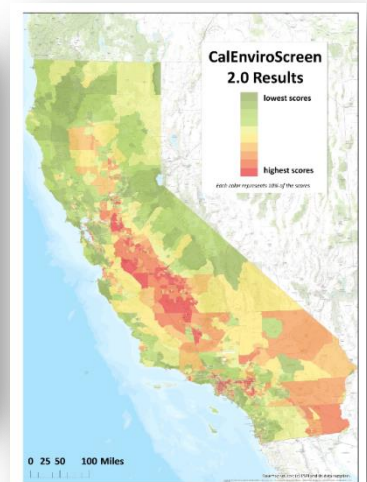
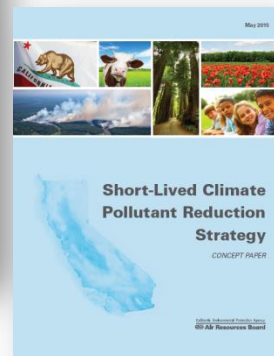
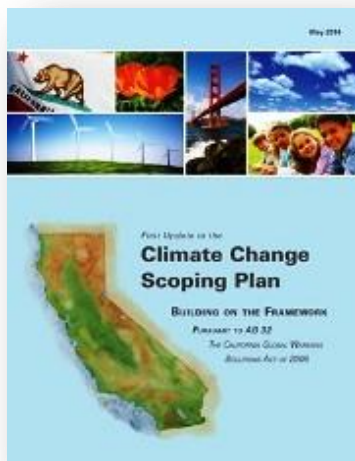
# Challenges Ahead

- Attain health based air quality standards by 2023 and 2031
- Minimize health risk from exposure to air toxics
- Meet key climate goals by 2030:
  - Reduce GHG emissions 40 percent below 1990 levels
  - Reduce petroleum use by 50 percent
  - Increase energy efficiency and derive 50 percent of electricity from renewable sources



# Overarching 2016 Priorities

1. Align strategies to achieve climate and air quality goals
2. Effective ongoing implementation of current programs
3. Strengthen environmental justice efforts



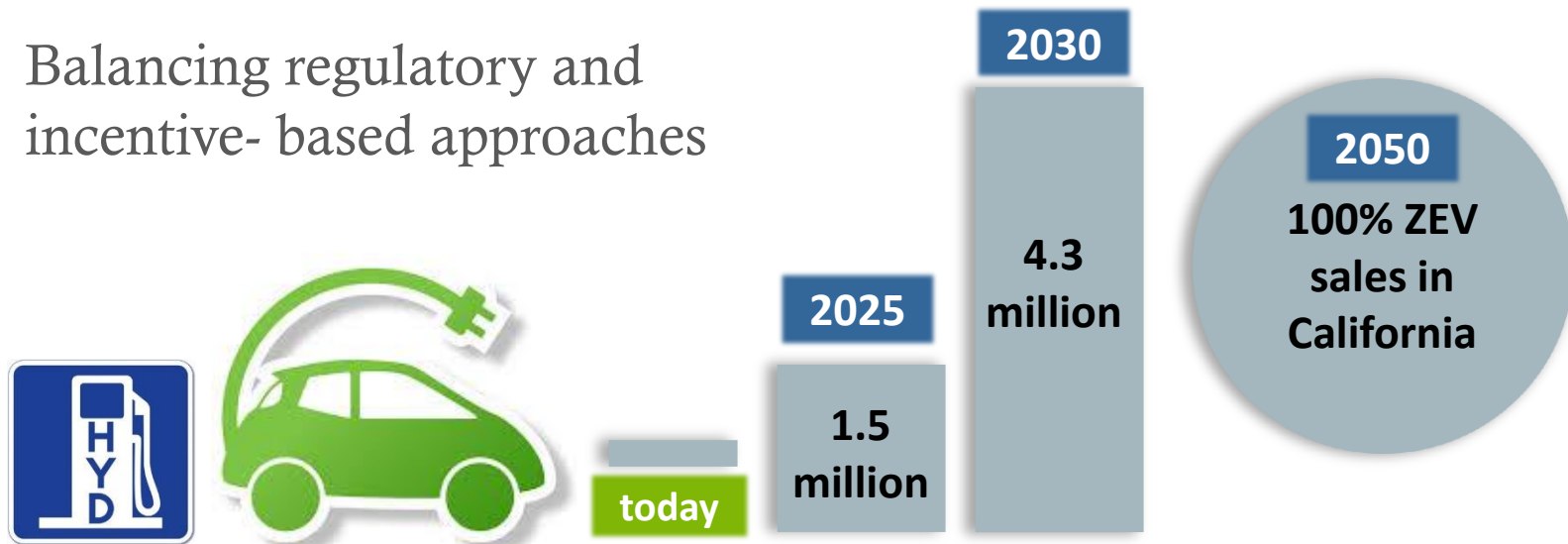
# Transformation to Meet California's Goals

- Increase ZEV penetration
- Introduce next generation of cleaner technologies and fuels



# Defining Mix of Policy Mechanisms

- Bringing advanced technologies into the market
- Balancing regulatory and incentive-based approaches



**Zero Emission Passenger Vehicles (ZEVs)**

# Investing in the Transformation

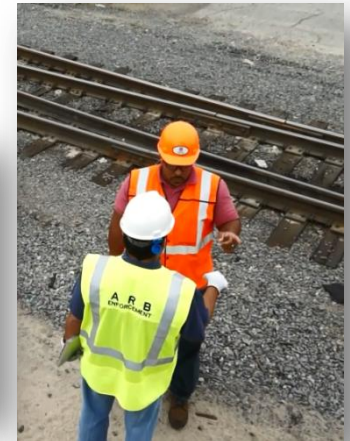
- Defining and prioritizing funding needs
- Leveraging public/private partnerships to build consumer outreach, awareness, and demand
- Encouraging innovative funding approaches





# On-going Implementation

- Truck and Bus Regulation
- Low Carbon Fuel Standard
- Cap-and-Trade
- Advanced Clean Cars





# Strengthen Environmental Justice Efforts

- Board member direction
- Increase outreach, monitoring, and enforcement
- Greater awareness and internal coordination
- Focus investments in disadvantaged communities



# Key 2016 Actions

Translating goals into actions

# Implementing the Transformation

- Board agenda in 2016: Translating objectives into actions
  - Air quality and climate plans
  - Updates on science and technology advancements
  - Regulatory measures
  - Funding for strategic investments
  - Engage with local, national, and international partners

# 2016 Integrated Planning Efforts

<b>State Implementation Plans (SIPs)</b>	Ongoing throughout 2016
<b>Climate Change 2030 Target Scoping Plan</b>	Draft in Spring 2016 Final in Fall 2016
<b>Sustainable Freight Action Plan</b>	Updates to the Board in early and mid-2016
<b>Short-Lived Climate Pollutant Reduction Strategy</b>	Final in mid-2016
<b>Federal Clean Power Plan Rules</b>	Draft in Spring 2016 Final in Fall 2016
<b>Update SB 375 Targets</b>	Late 2016

# On-going Evaluations of Technologies and Fuels

- Technology assessments
- Mid-term review





# Regulatory Measures: Building on Technology Advancements

- Ocean Going Vessels at-Berth Amendments
- Heavy-Duty Phase 2 GHG Standards
- Start work on future regulations
  - Heavy-Duty Truck Low NO<sub>x</sub>
  - Post-2025 clean car standards
- Petition EPA to act on locomotives



# Introduction of Transformative Technologies

- Advanced Clean Transit Regulation
- Innovative Technology Certification Flexibility
- Initiate Work on Last-Mile Delivery Regulation



# Fuels and Processes Innovation

- Emissions from Oil and Gas Production, Processing, and Storage GHG Regulation
- New Low Emission Diesel Standard





# Creating Sustainable Systems

- Update SB 375 GHG emission reduction targets
- Establish freight efficiency target



# Continuing Success of Cap-and-Trade Program

- Showcase Cap-and-Trade program nationally and internationally
- Integrate with Federal Clean Power Plan compliance
- Adaptive Management Program underway to monitor potential air quality impacts





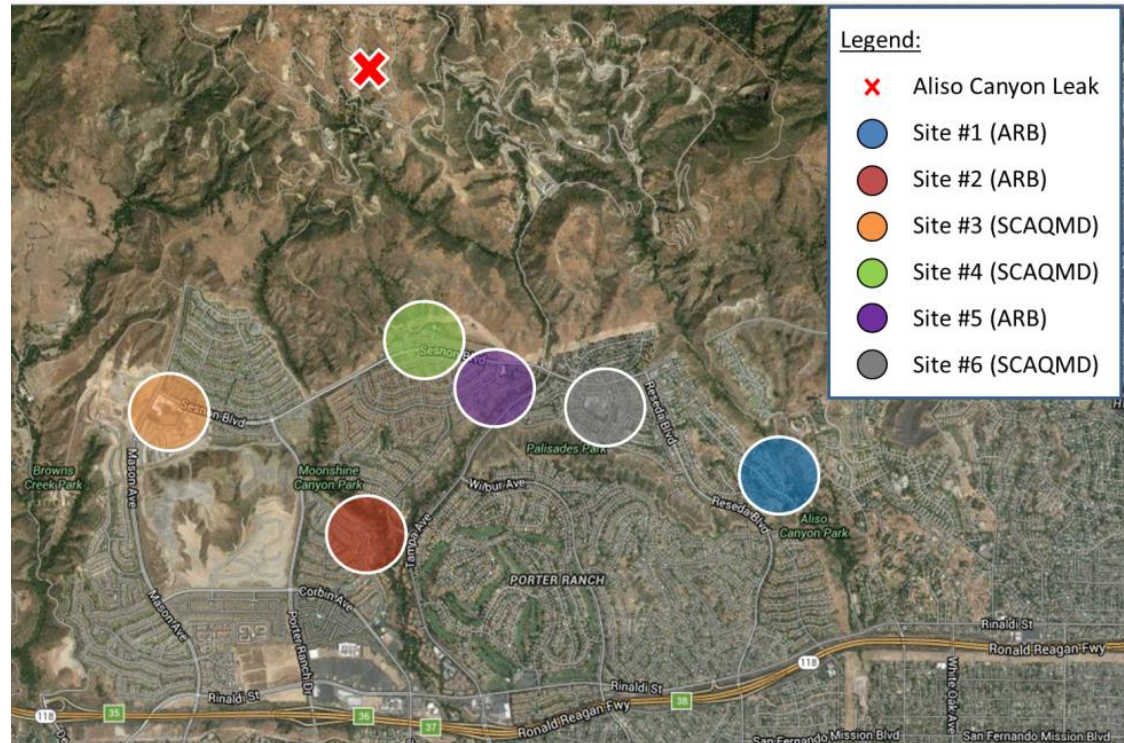
# Strategic Funding and Investments

- Approval of ARB funding allocations
  - Low Carbon Transportation
  - Carl Moyer
- Influence on Cap-and-Trade Proceeds
- Principles and priorities for freight transportation spending
- Continued funding necessary to implement transformation



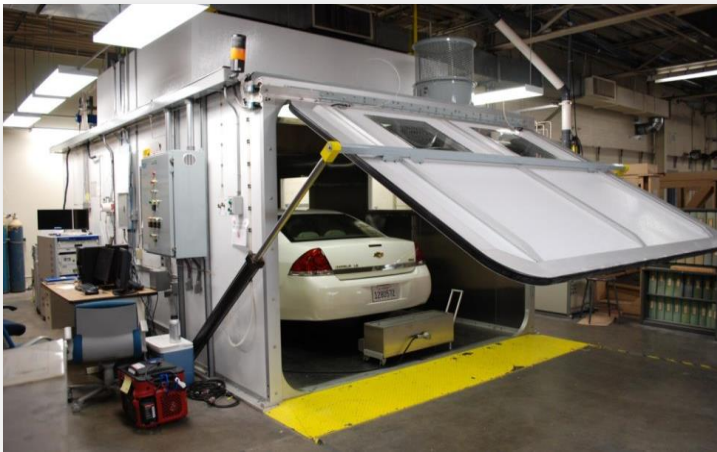
# Ensuring Reductions and Compliance in the Real World

## Aliso Canyon gas leak



# Ensuring Reductions and Compliance in the Real World

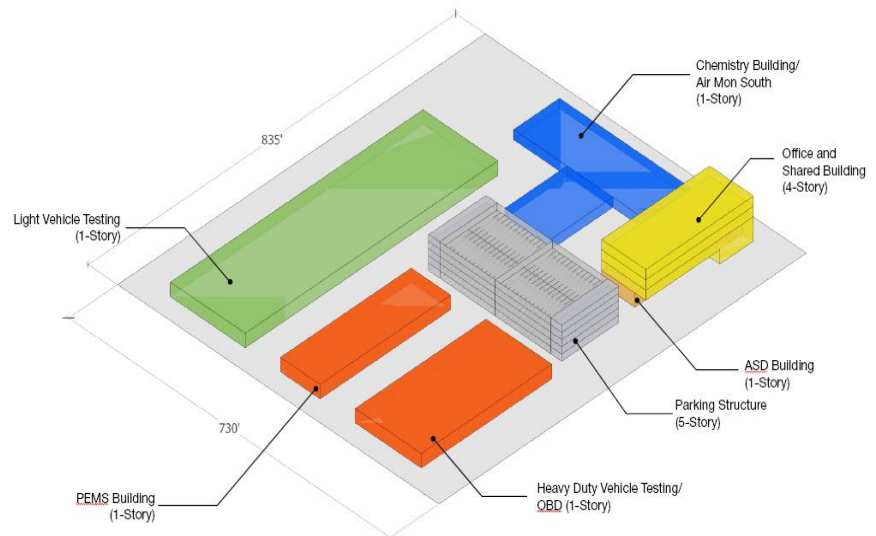
Volkswagen diesel vehicles





# Site Evaluation for New Southern California Facility/ Laboratory

- Stakeholders and staff briefings mid-February
- Board meeting March 17, 2016 in El Monte



# Looking Forward

The transformation is underway



# New Technologies Are Ready

- Retail sales of fuel cell vehicles launched in California
- Much longer-range all-electric vehicles at reasonable cost
- Autonomous and connected vehicle technology being demonstrated



# Clean Fuels Are Here

- World's first retail station certified to sell hydrogen in \$/kg
- Fast charging stations dramatically expand
- Increasing volumes of renewable fuels being sold



# Systems Are More Efficient

- Automated terminals are transforming goods movement
- Transportation and land use are becoming more integrated and communities are becoming more sustainable





# 2016 – A Pivotal Planning Year

- Continued implementation of key programs
- Key year for developing plans that put us on track for meeting air quality and climate goals
- Tremendous opportunities to continue leading the nation and world on how to achieve clean air and thrive economically