California Environmental Protection Agency

Air Resources Board

2016 Program Priorities

January 21, 2016

Outline

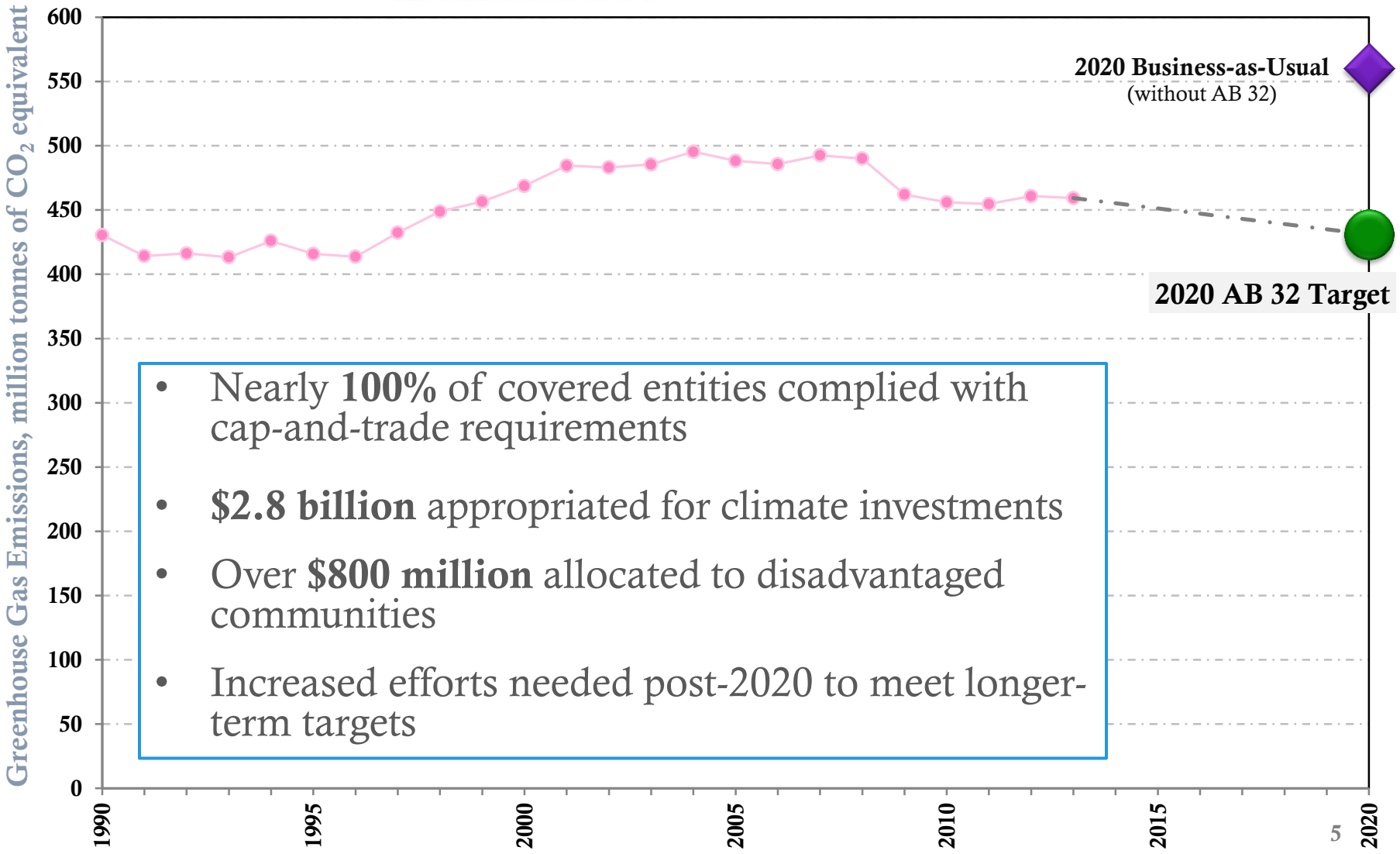
- Reflect on 2015 Achievements
- 2016 Priorities and Objectives
- Key 2016 Actions
- Looking Forward

Reflect on 2015 Achievements

Continuing Air Quality Accomplishments

- Program implementation further reduced NOx by100 tons per day
- 2 more areas now meet ozone standard
- Continued reduction in air toxics

On Track to Meet 2020 Climate Commitment



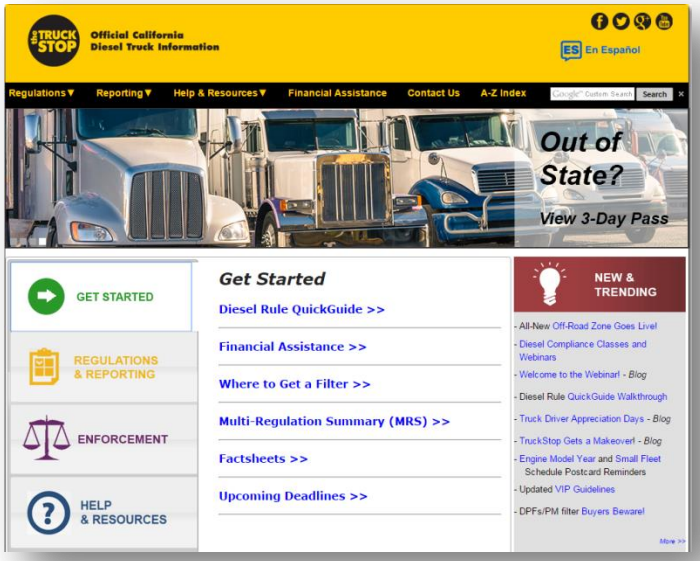
- Nearly **100%** of covered entities complied with cap-and-trade requirements
- **$2.8 billion** appropriated for climate investments
- Over **$800 million** allocated to disadvantaged communities
- Increased efforts needed post-2020 to meet longer-term targets

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

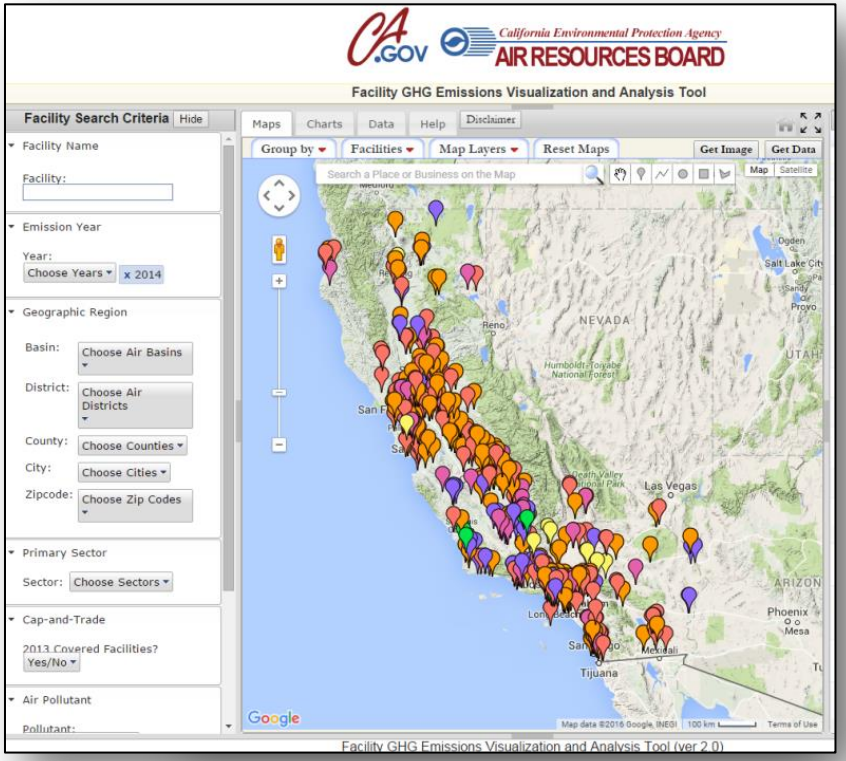
Strengthened Compliance and Enforcement

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



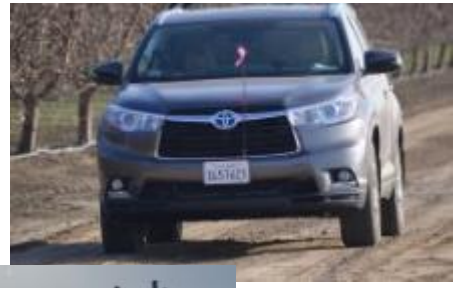
Expanded Analytical Capabilities

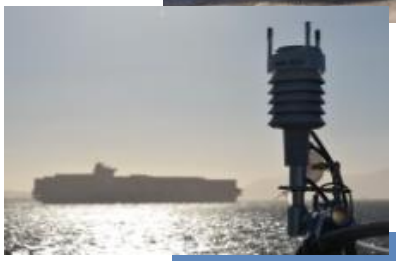
- GHG facility mapping tool
- Technology assessments
- Vision 2.0 model
- EMFAC 2014 model
- Risk assessment guidance and mitigation strategies
- Strengthened economics team



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

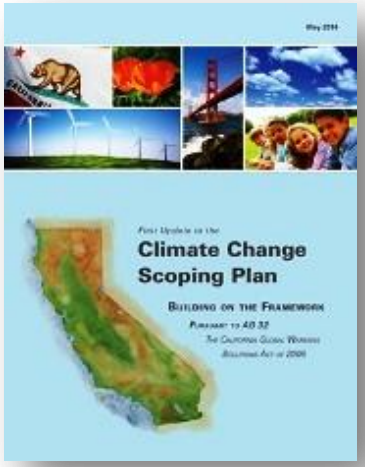
A unified vision for transformation

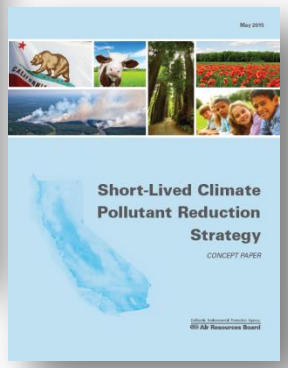
Challenges Ahead

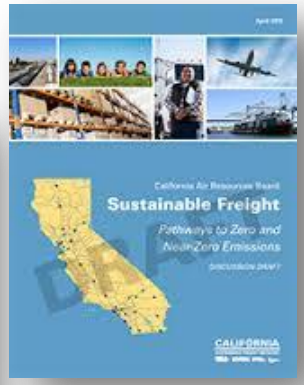
- Attain health based air quality standards by 2023 and 2031
- Minimize health risk from exposure to air toxics
- Meet key climate goals by 2030:
  - Reduce GHG emissions 40 percent below 1990 levels
  - Reduce petroleum use by 50 percent
  - Increase energy efficiency and derive 50 percent of electricity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

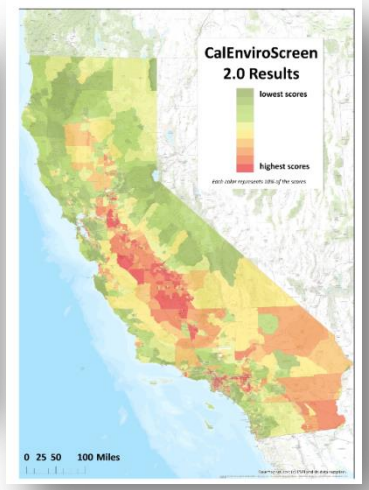
Overarching 2016 Priorities

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







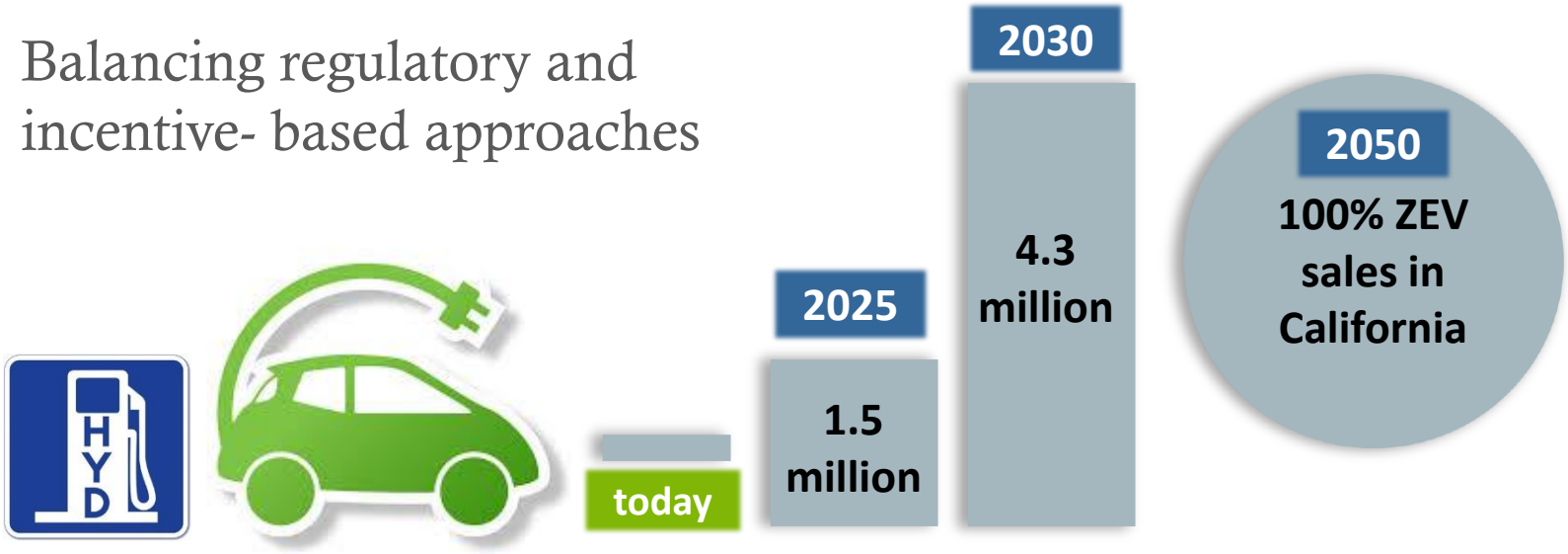


Transformation to Meet California's Goals

- 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



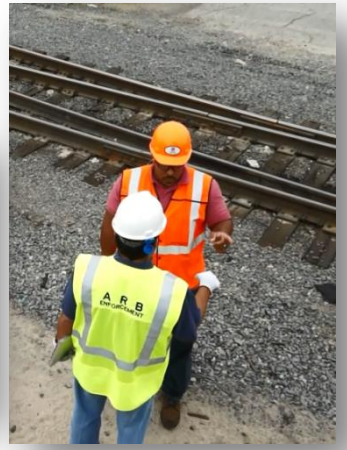
Zero Emission Passenger Vehicles (ZEVs)

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

State Implementation Plans (SIPs)	Ongoing throughout 2016
Climate Change 2030 Target Scoping Plan	Draft in Spring 2016 Final in Fall 2016
Sustainable Freight Action Plan	Updates to the Board in early and mid-2016
Short-Lived Climate Pollutant Reduction Strategy	Final in mid-2016
Federal Clean Power Plan Rules	Draft in Spring 2016 Final in Fall 2016
Update SB 375 Targets	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 NOx
  - Post-2025 clean car standards
- Petition EPA to act on locomotives

Introduction of Transformative Technologies

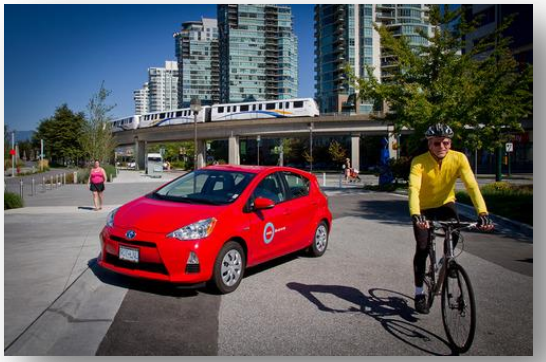
- Advanced Clean Transit Regulation
- Innovative Technology Certification Flexibility
- Initiate Work on Last-Mile Delivery Regulation

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

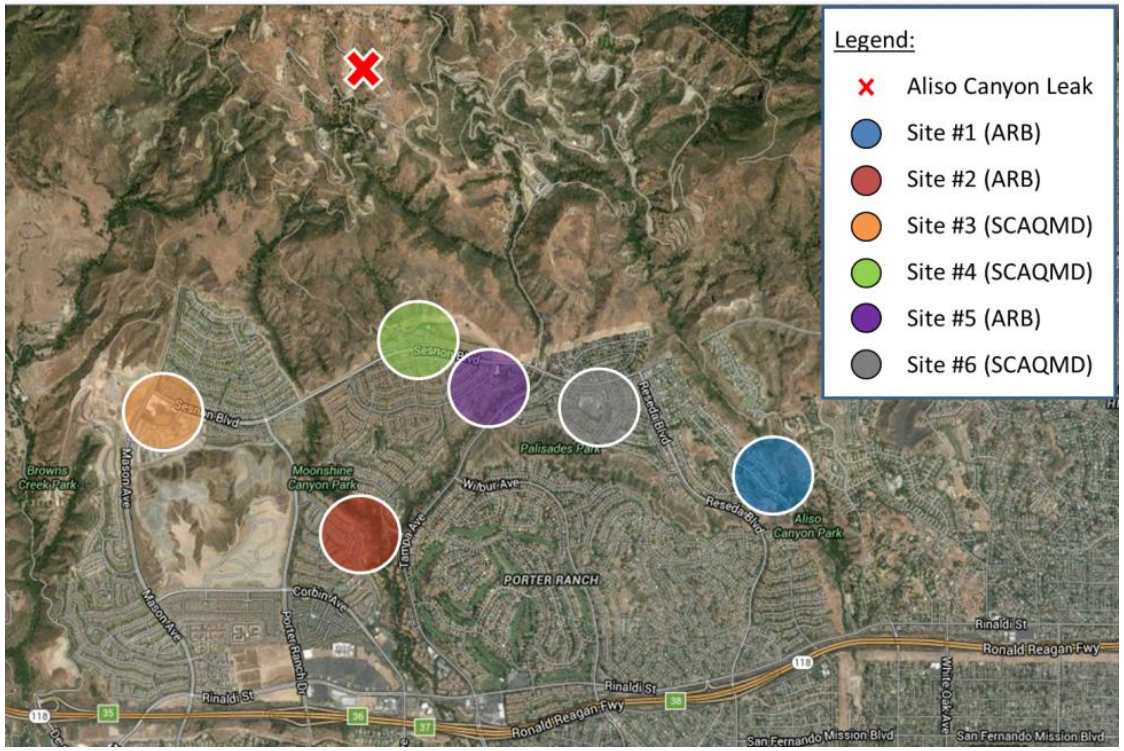
COP21 · CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

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

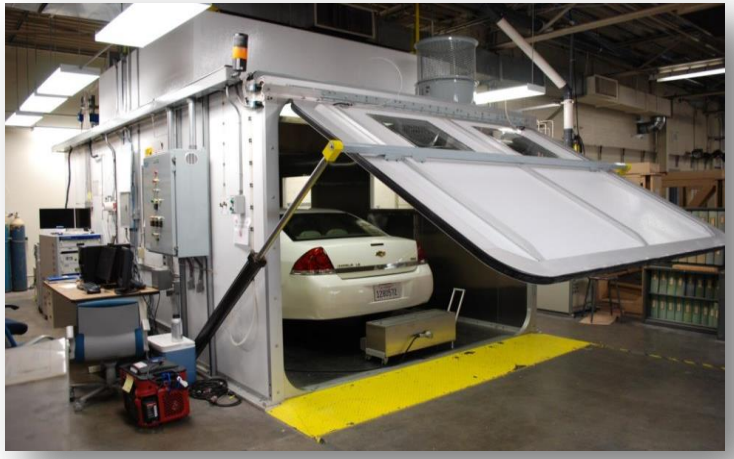
Ensuring Reductions and Compliance in the Real World

Aliso Canyon gas leak



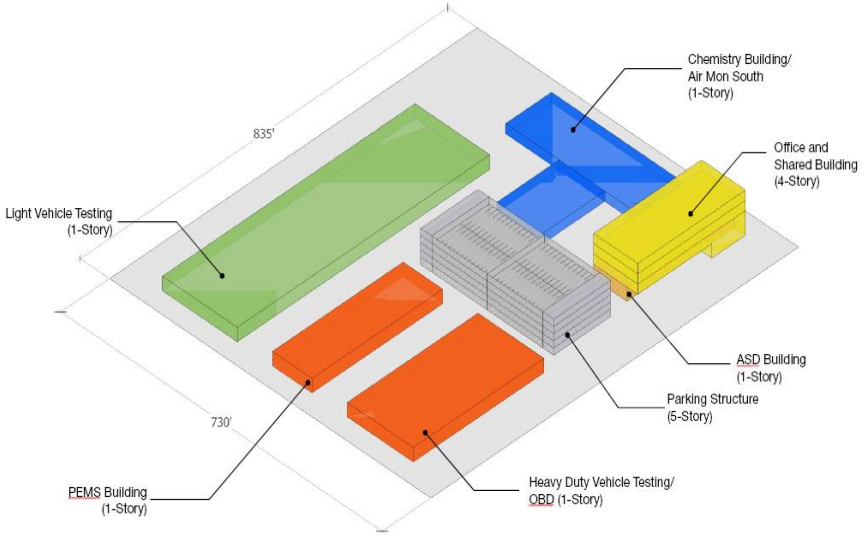
Ensuring Reductions and Compliance in the Real World

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