Industry

ALLIANCE
AIAM
EMA
30+ Years of Progress

Year / Technology

2010-3-3
Requirements

- Durability
- On-Board Diagnostics
- Evaporative Emissions
- Certification
- In-Use Testing
- Warranty
Light-Duty Vehicles: LEV II 2010-2030

67% Reduction
California Criteria Emissions 2015-2030
LEV II

2015
- Offroad: 22%
- PC-LDT: 12%
- Other Onroad: 24%
- Stationary: 21%
- Area: 21%

2020
- Offroad: 21%
- PC-LDT: 10%
- Other Onroad: 20%
- Stationary: 25%
- Area: 24%

2010-3-3
California Criteria Emissions 2015-2030 LEV II

**2025**
- Offroad 20%
- PC-LDT 8%
- Other Onroad 18%
- Stationary 27%
- Area 27%

**2030**
- Offroad 21%
- PC-LDT 7%
- Other Onroad 16%
- Stationary 28%
- Area 28%
Still Working

- Lower fleet average emissions
- Lower evaporative standards
- Lower SFTP Standards
- Longer durability
- Maintain low PM emissions
Challenges

- Scarce resources
- Extremely low emissions very difficult to reduce
- ZEV Mandate
- GHG Emission Requirements
- OBD requirements
Particulate Matter Standard

- Support maintaining low PM levels
- Low levels are difficult to measure
  - Non-vehicle emissions
  - Test-to-test variability
  - Lab-to-lab variability
  - Vehicle-to-vehicle variability
- Continue working with ARB to ensure measurement issues are addressed
Evaporative Emissions

- Support goal of extending current PZEV technology to light-duty fleet, but must address:
  - Non-fuel emissions
  - E10 cert fuel
- 0.15 gram per test not consistent with goal
- Robust test program critical to determine appropriate standards
SFTP

- SFTP intended to address off-cycle emissions by calibration changes (FTP sets hardware standards)
- Agree to the comparable stringency for SFTP as for FTP
- Agree to change of compliance requirements from 4k demonstration to 150k durability
- Industry supports 2 composite based approaches
- Consider the interactions of future technologies and GHG requirements