Vision for Clean Air: A Framework for Air Quality and Climate Planning

Air Resources Board Meeting

June 28, 2012

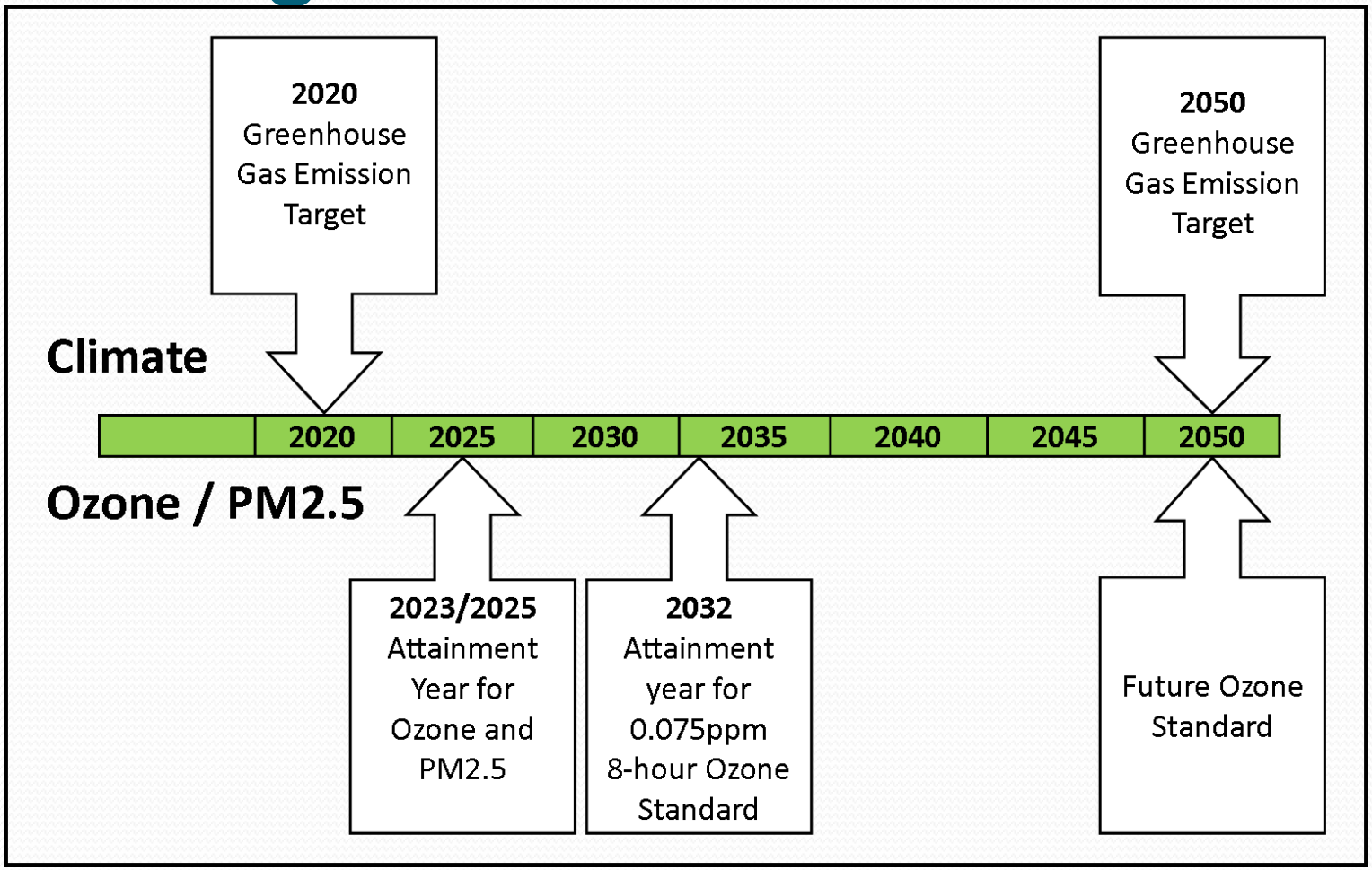
California Environmental Protection Agency

Air Resources Board

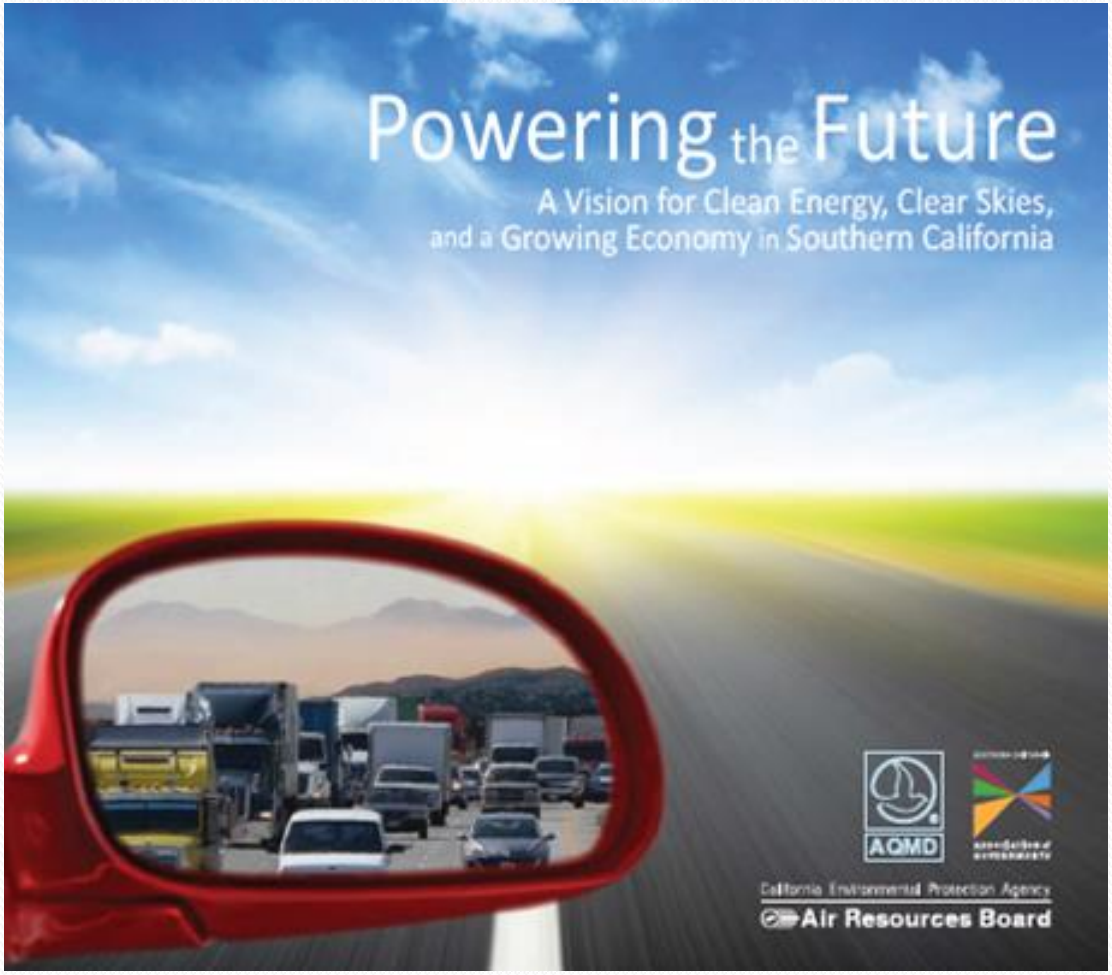
Vision's Planning Framework

- **Take a broader view of planning from multi-pollutant perspective**
- **Integrate planning efforts:**
  - **Clean Air Act – "SIPs"**
  - **AB 32 Scoping Plan Updates**
  - **Freight Transport planning**

Planning Horizons



“Powering the Future” Set Stage



Key Planning Targets

- **Clean Air Act compliance requires an 80% reduction in NOx emissions by 2023**
- **85% reduction in greenhouse gases from today's levels is needed to meet 2050 goal**

Benefits of Comprehensive Planning

- **Taking a broader look is necessary to develop the comprehensive clean air strategies needed**
- **Provides a more comprehensive view of air quality and climate strategies in the broad context of the economy and environment**

Vision's Planning Process

- **Start with benefits of existing programs**
- **Develop scenarios for further improvements in efficiency and cleaner technology, fuels, and energy sources**
- **Look at multi-pollutant results to inform plan development**

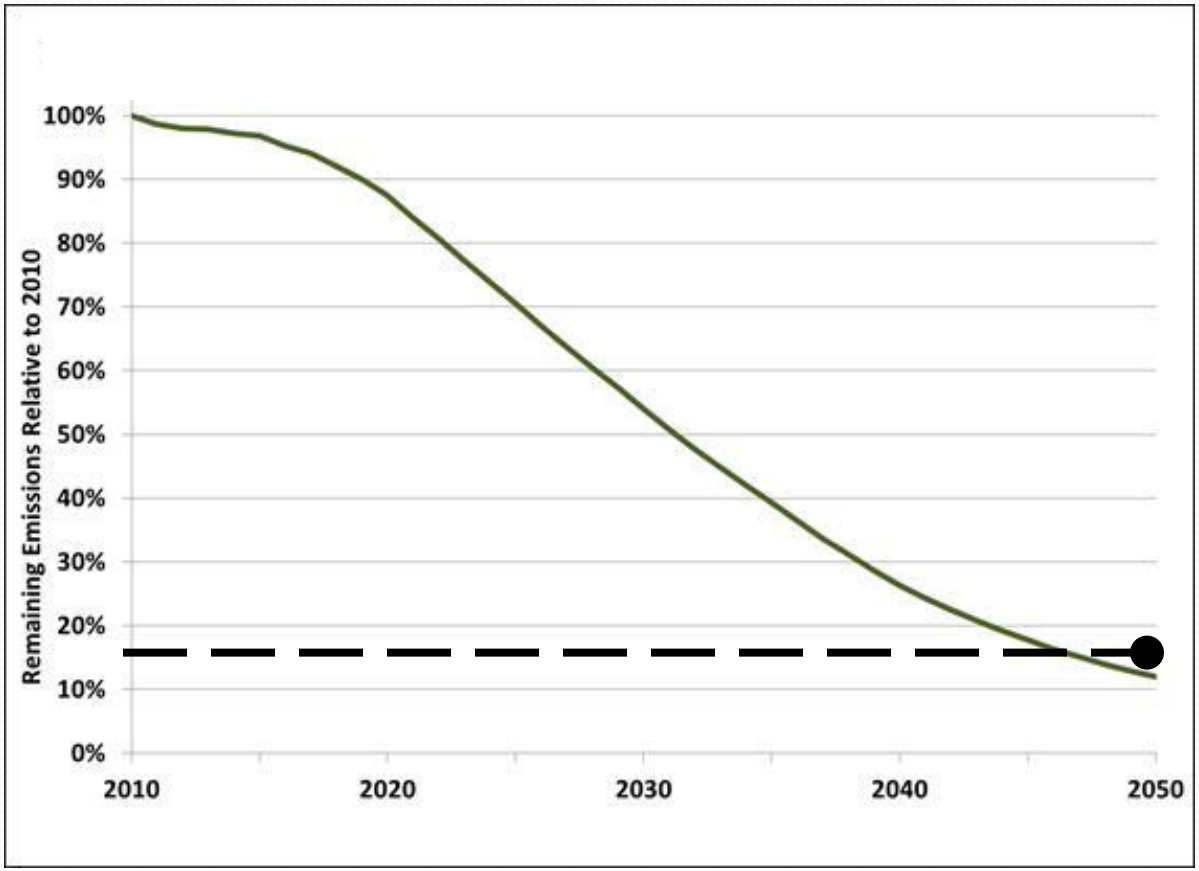
Vision: Multi-Pollutant View

- **Truck example shows need to consider multi-pollutant benefits**
- **For example, transition to biofuels for GHG does not reduce engine NOx emissions**
- **Multi-pollutant view shows additional NOx strategies are needed to meet SIP requirements**

An Example of a Multi-Pollutant View: A New Perspective…

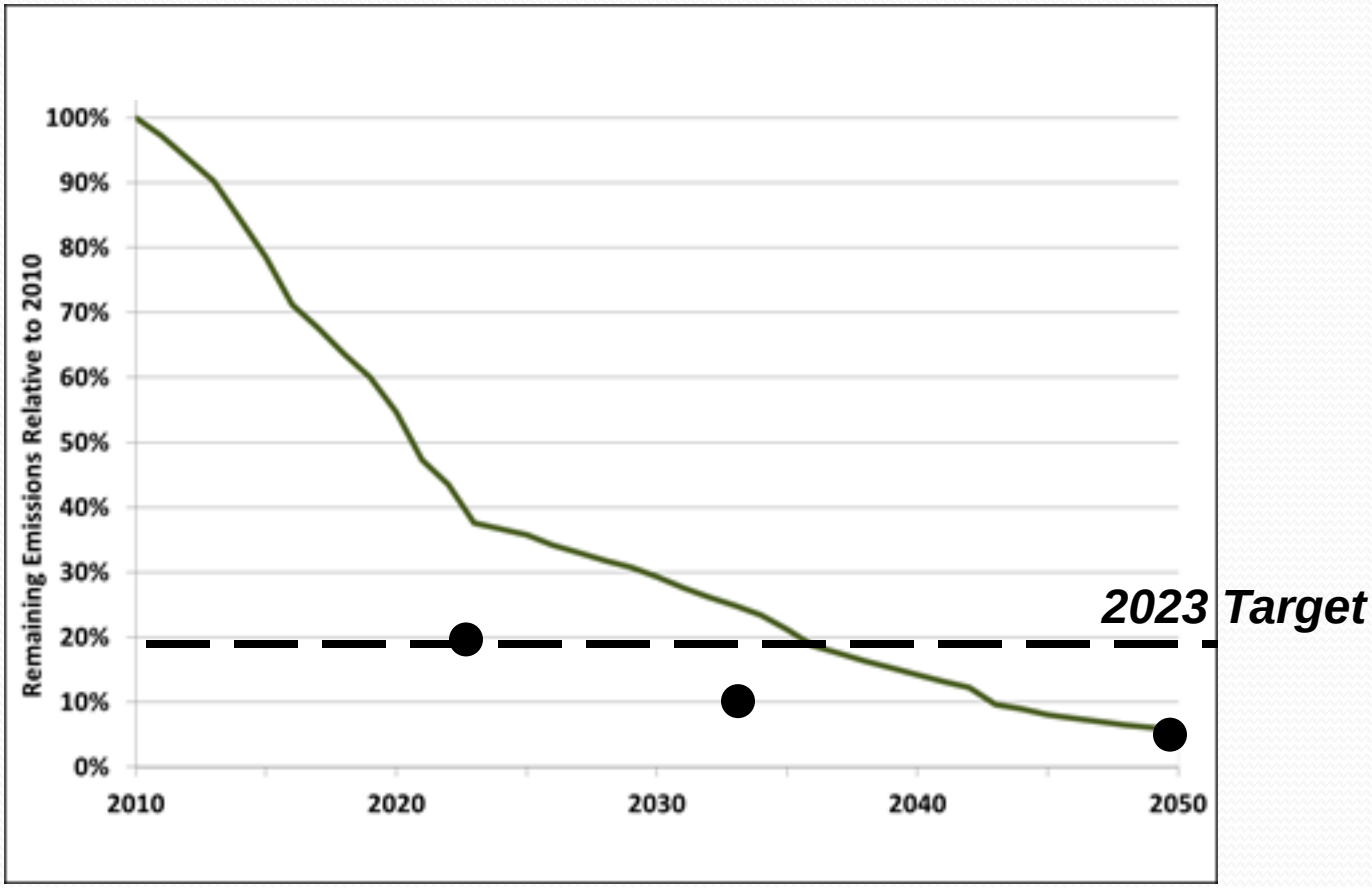
Truck GHG Emissions

Statewide GHG Emissions, Heavy Duty Trucks

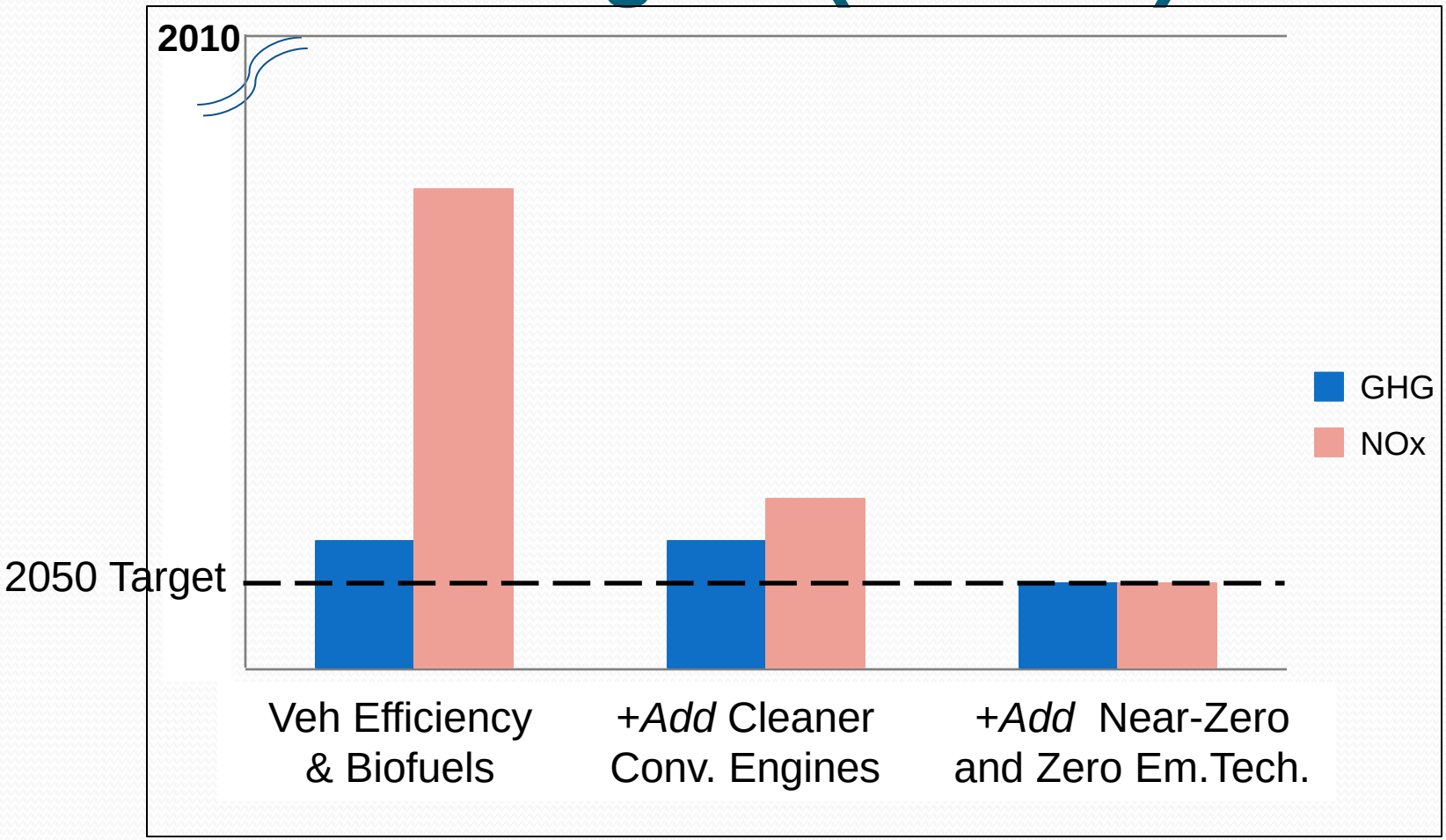


Truck NOx Emissions

South Coast NOx Emissions, Heavy Duty Trucks

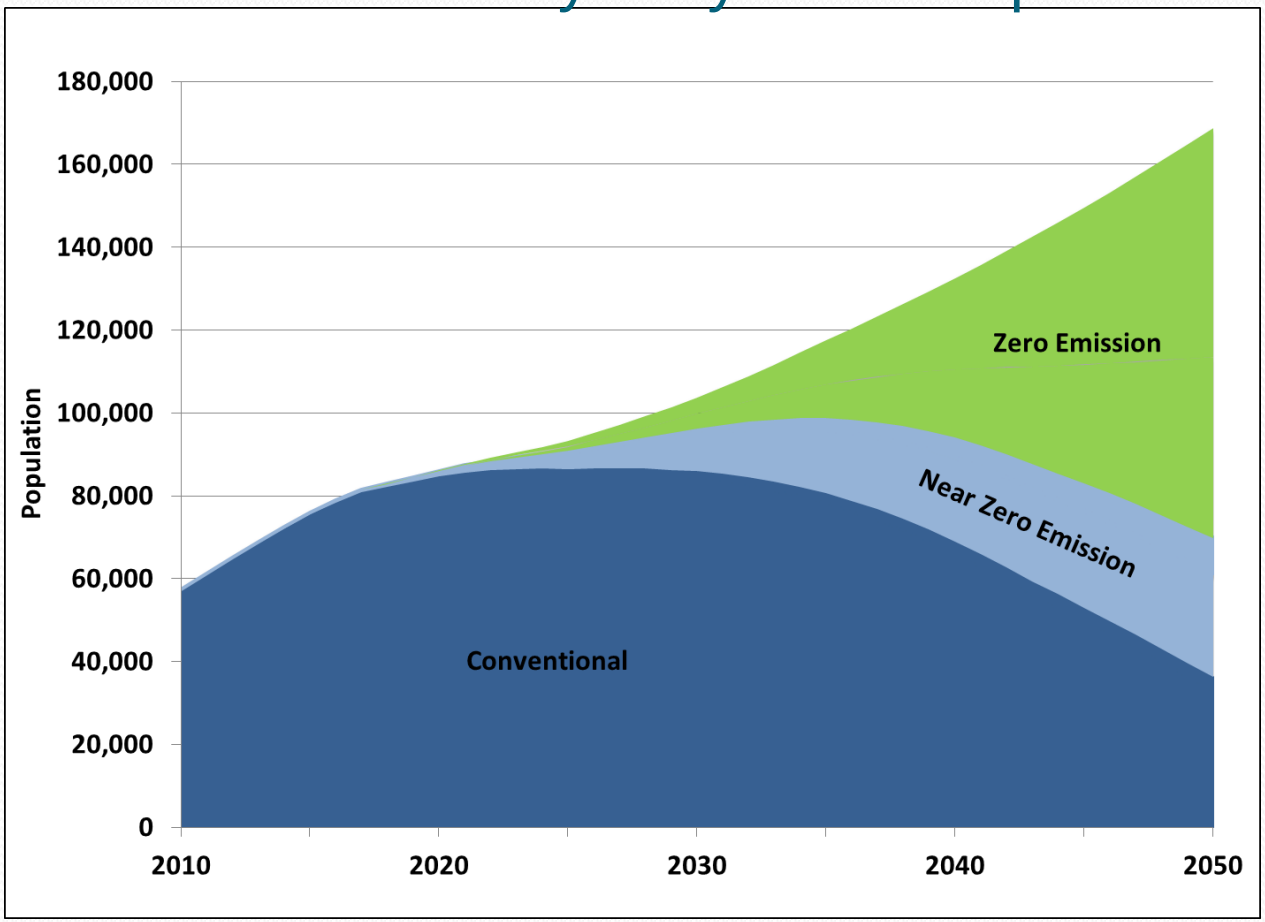


Opportunity to Address Multiple Pollutant Targets (Trucks)



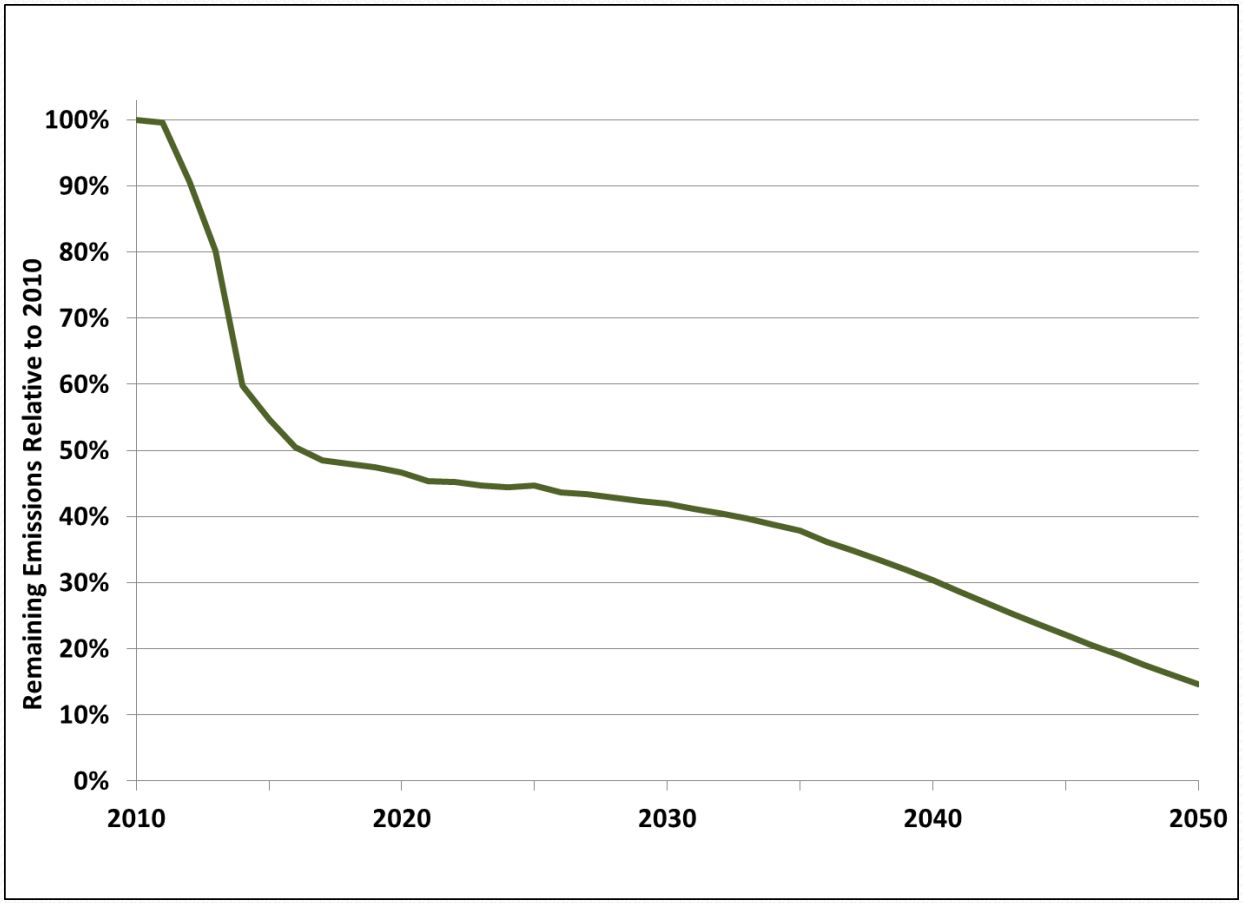
Technology Transformation for Trucks

South Coast Heavy Duty Truck Population



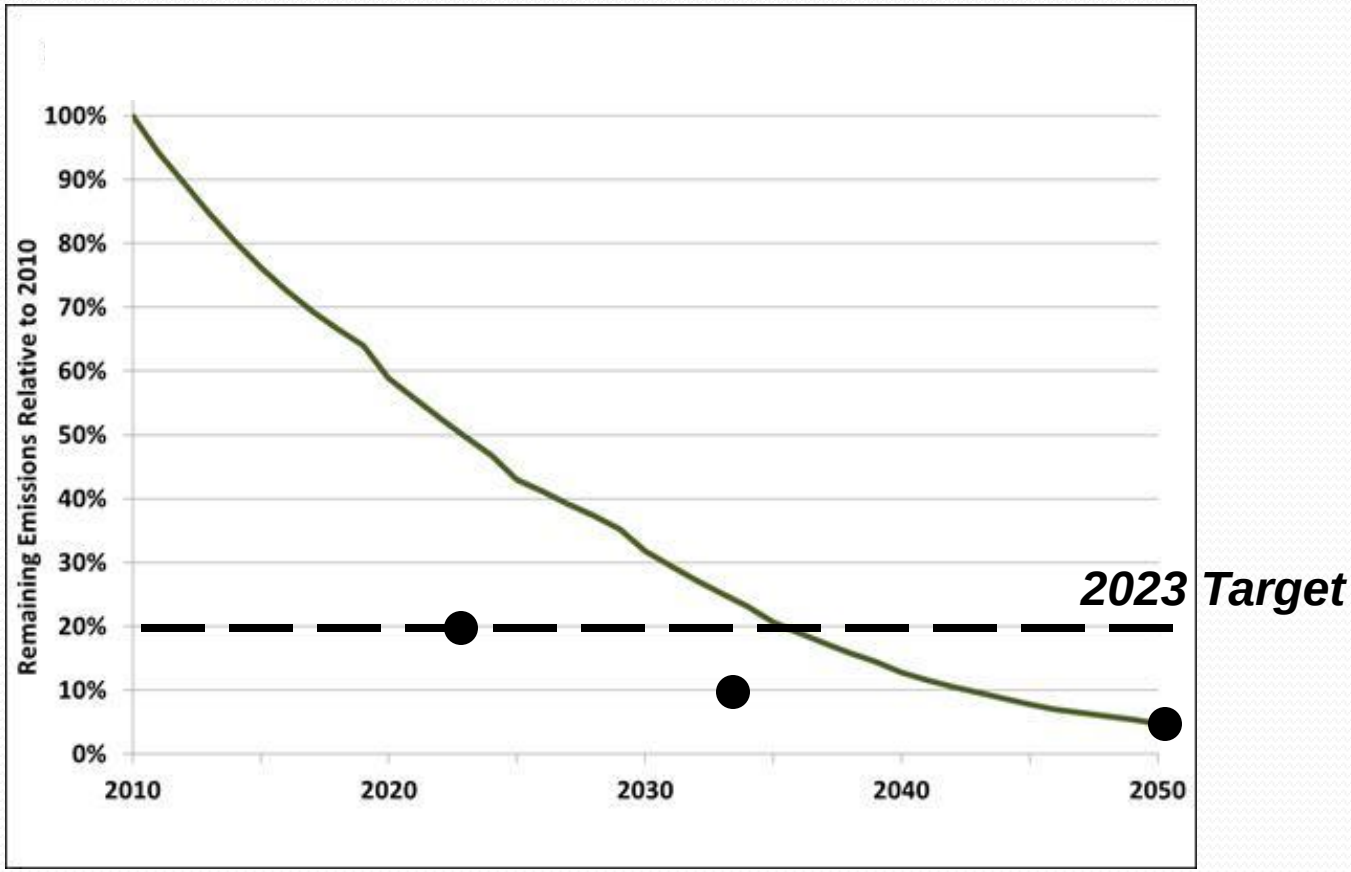
Truck Diesel PM

South Coast PM2.5 Tailpipe Emissions, Heavy Duty Trucks



Car NOx Emissions

South Coast NOx Emissions, Light Duty Vehicles



Questions Moving Forward

- **How best to deploy technologies, fuels, and other strategies to meet both air quality and climate goals?**
- **How best to coordinate federal, state, and local activities to ensure success?**
- **What are the implications of air quality deadlines that precede greenhouse gas targets?**
- **What are the energy demands of air quality and climate strategies?**

Next Steps

- **Workshops on Vision Framework**
- **Consideration of SIPs in 2012 & 2015**
- **Scoping Plan and Freight Transport Updates**