



2016 Air Quality Management Plan Development Update

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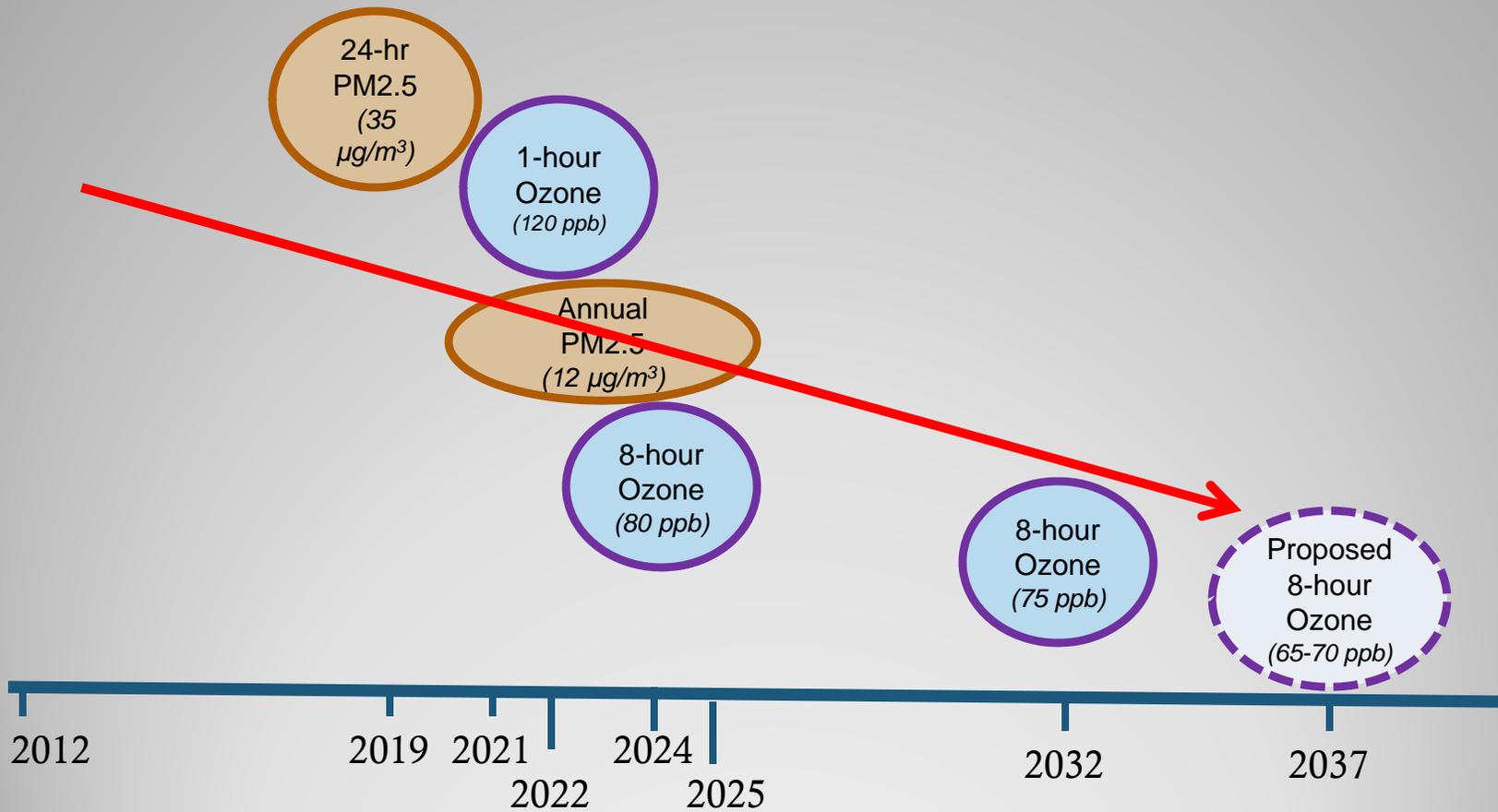
Cleaning The Air That We Breathe...

Air Quality Standards to be Addressed

- 8-hour Ozone (*75 ppb*)
 - ❑ “Extreme” attainment year: 2032
(*demonstrate in 2031*)
- Annual PM_{2.5} (*12 µg/m³*)
 - ❑ “Moderate” attainment year: 2021
 - ❑ “Serious” attainment year: 2025
- 8-hour Ozone (*80 ppb*)
 - ❑ “Extreme” attainment year: 2024
(*demonstrate in 2023*)
- 1-hour Ozone (*120 ppb*)
 - ❑ Attainment year: 2022
- 24-hour PM_{2.5} (*35 µg/m³*)
 - ❑ “Serious” attainment year: 2019



Timeline for Meeting the Standards



Key Challenges



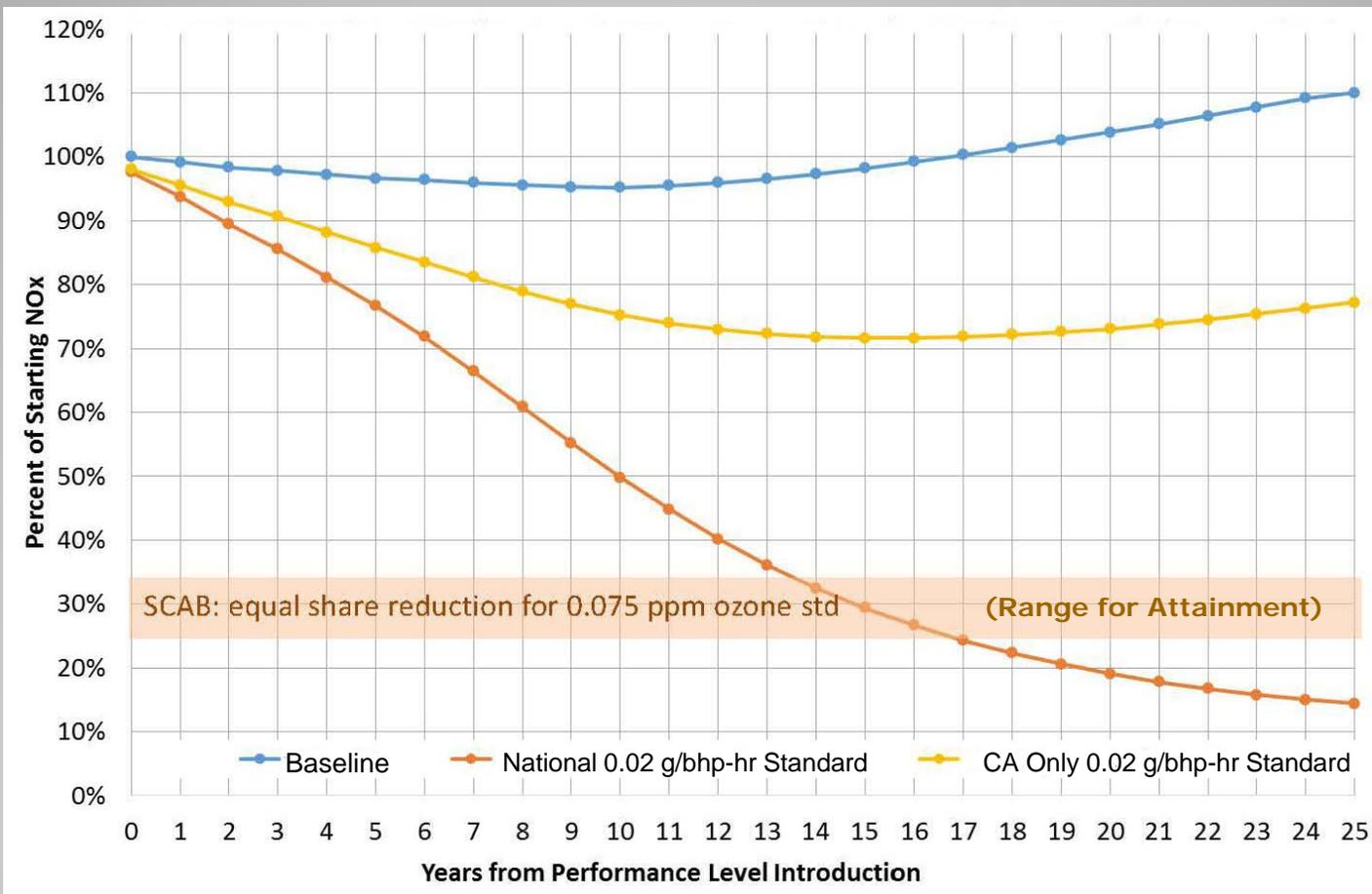
Plan Objectives

1. **Eliminate** reliance on “**black box**” (*future technologies*) to the extent feasible
 - ❑ Define specific pathways and measures to reach attainment
2. Calculate and take credit for **co-benefits** from other planning efforts (*e.g., GHG reduction targets, energy efficiency, transportation*)
3. Develop strategy with **fair-share** emission reduction commitments at federal, state, & local levels
 - ❑ New federal engine emission standards
 - ❑ Additional authority provided to the states

Plan Objectives

4. Significant **funding** for incentives
 - ❑ Early deployment of zero and near-zero technologies – *fleet turnover is critical*
 - ❑ GHG Reduction Funds – *current allocation for air quality too low*
 - ❑ **Smart investments in technologies that meet multiple objectives** - *air quality, climate, toxics, energy efficiency*
5. Select the **most efficient** and **cost-effective** path to achieve multi-pollutant and multi-deadline targets
6. Prioritize non-regulatory, innovative and “**win-win**” approaches for emission reductions

Emission Analysis of Statewide vs National Introduction of New Truck Standards



Source: Presentation by Mr. Cory Palmer, ARB at the Symposium on California's Development of its Phase 2 Greenhouse Gas Emission Standards for On-Road Heavy-Duty Vehicles (April 22, 2015)

Control Measure Development Approach



1. Establish NO_x carrying capacity targets
2. NO_x emission reductions driven by 8-hour ozone NAAQS (*80 ppb*) by 2023
 - CARB Mobile Source Strategy (*discussion draft released October 1, 2015*) plus USEPA actions
 - Additional local mobile and stationary measures
 - Strategic, cost-effective VOC reductions where needed
3. Assess resulting PM_{2.5} co-benefits
 - Additional direct PM_{2.5}, SO_x, and ammonia control measures as needed to ensure NAAQS are met

Control Measure Ideas

- Ideas developed from a number of sources:
 - ❑ Control Strategy Symposium
 - ❑ RACT/RACM analysis
 - ❑ SCAQMD Staff from several divisions
 - ❑ Public input
 - ❑ Previous Plan proposals
- Amount of emission reductions need to be quantified
- Cost effectiveness will be considered in the selection



Preliminary Control Measure Ideas

Potential Measure Concepts

Priority Ozone Measures: Co-Benefit Reductions from GHG Programs, Policies and Incentives; Residential Weatherization and Other Energy Efficiency; Energy Storage and Smart Grid; Commercial and Multi-unit Residential Space Heating and Boilers

Additional Ozone Measures If Needed: Non-Refinery Flares; Restaurant Burners; Fuel Cells; Leak Detection and Repair; Coatings, Solvents, Adhesives, and Lubricants; Breakdown Procedures and Process Re-design; Cool Roof Technology; Stationary Source Incentivizes; Education and Public Outreach

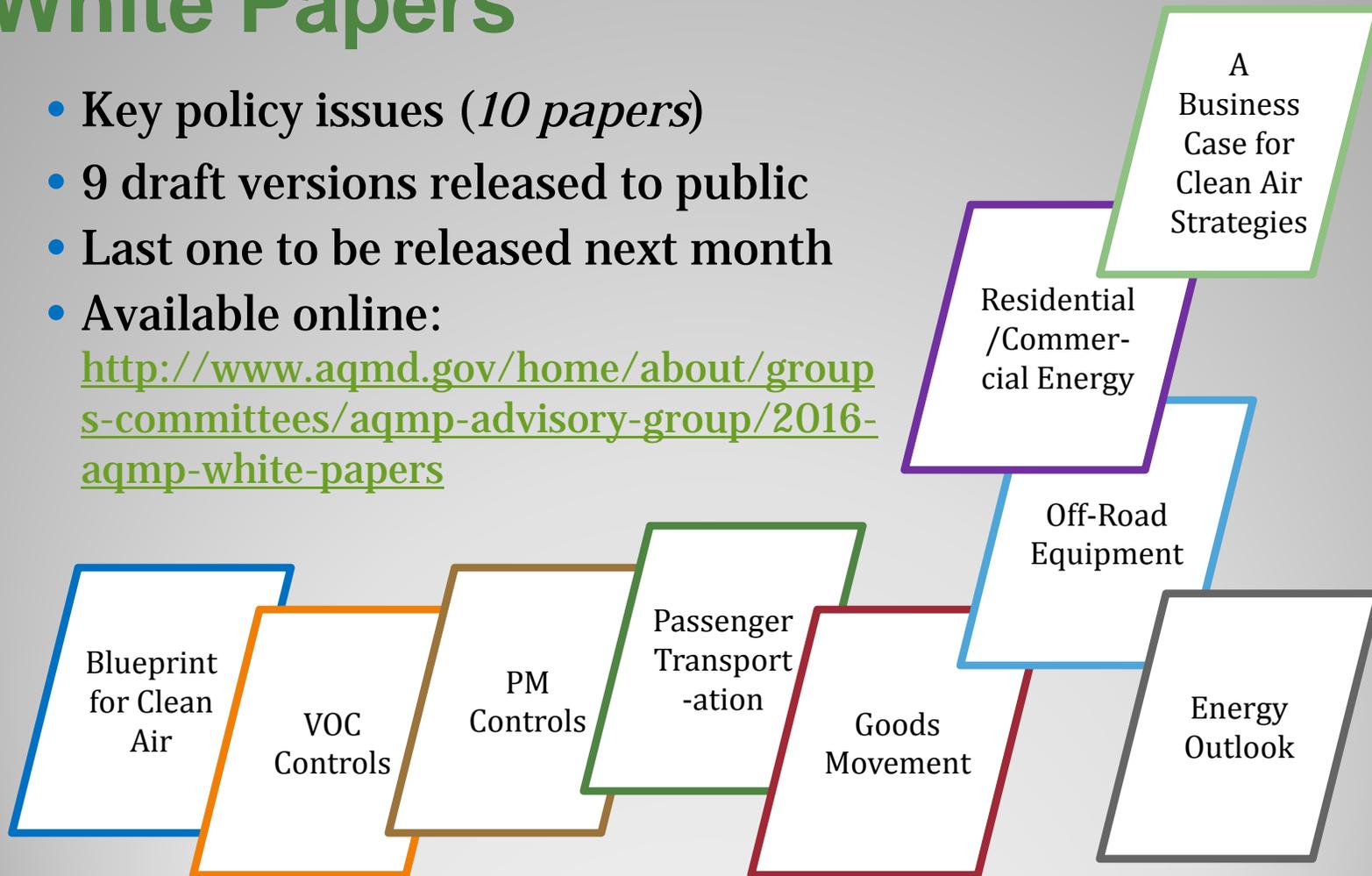
Priority PM2.5 Measures: Commercial Cooking; Cooling Towers; Fugitive Dust; Manure Management; NOx Controls

Additional PM2.5 Measures If Needed: Abrasive Blasting; Grinding; Agricultural, Prescribed and Training Burning; Wood Burning Fireplaces; Greenwaste Composting

All Feasible Measures: Breweries/Wineries; Pulp and Recycled Paper Milling; Indirect Sources; All Feasible Measures

White Papers

- Key policy issues (*10 papers*)
- 9 draft versions released to public
- Last one to be released next month
- Available online:
<http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers>



2016 AQMP Development Schedule

Action Item	Milestone Date
Emission Inventory	May-September 2015
Modeling; control strategy development	June – October 2015
CARB's Mobile Source Strategy Discussion Draft	October 2015
Release Draft 2016 AQMP	November/December 2015
Release Preliminary Socioeconomic Analysis	December 2015
Release Draft EIR	December 2015/January 2016
Release Revised Draft 2016 AQMP	February 2016
Regional Public Hearings	February/March 2016
Release Draft Final 2016 AQMP	March 2016
Board Approval of 2016 AQMP	April/May 2016
CARB Approval	June 2016
EPA SIP Submittal Deadline	July 20, 2016