

# Technology Advancement Office Advisory Group Meeting

## Overview and Goals for the day



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Assistant Deputy Executive Officer  
Technology Advancement Office

# Technology Advancement Advisory Group



- Quick updates in technology areas
- Potential project ideas

# Process

- Solicit input for Plan Update
- Draft Plan Update – October 2010  
("looking ahead")
- Annual Report – March 2011  
("looking back")
- Submit to both documents to State  
Legislature by March 31



# Structure for Today

- Overview for context
  - Broad snapshot of AQMD activities
  - Agency-wide updates
- Specific discussion on technology sectors
- Solicit input on direction of program

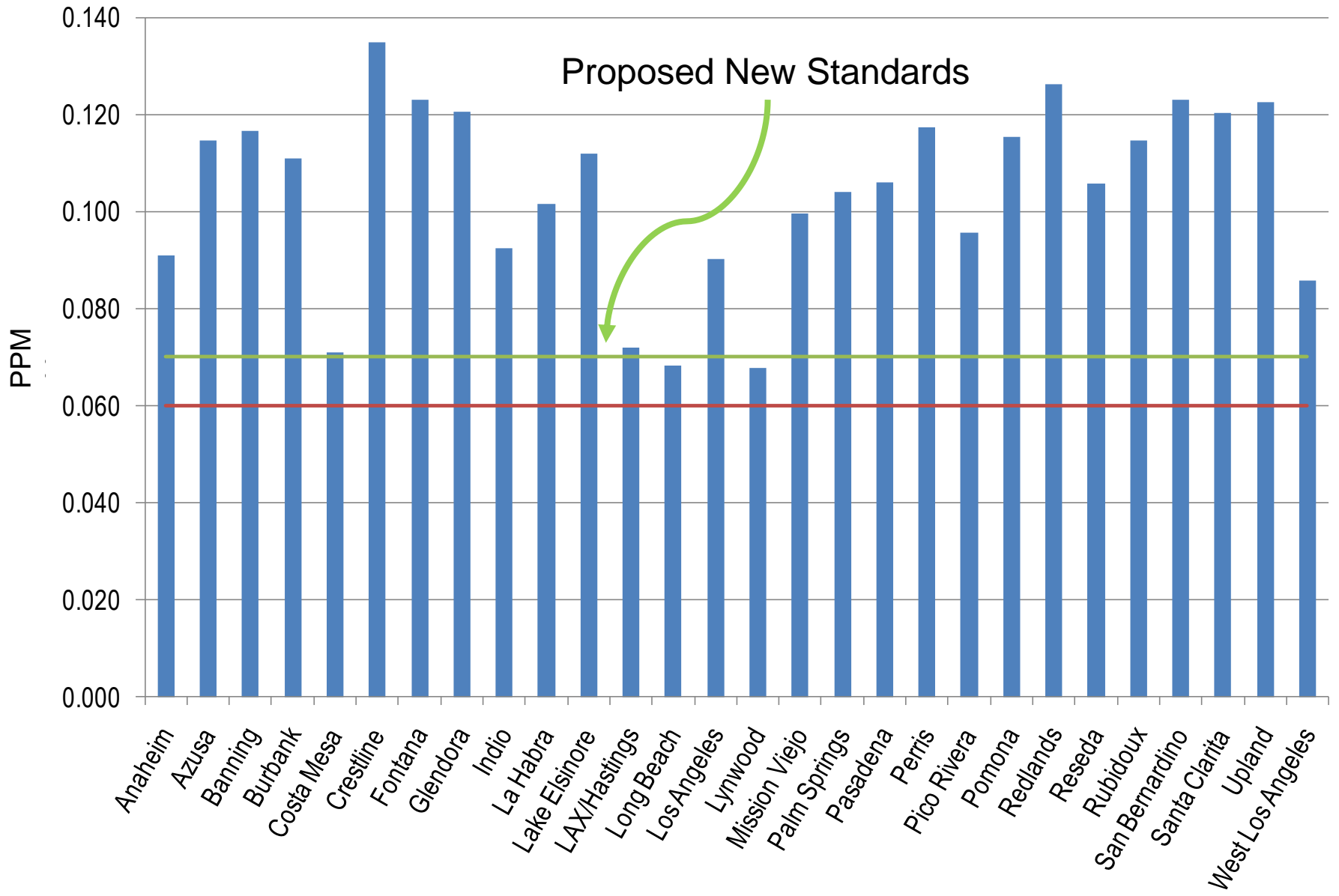
# Agenda

## Welcome and Overview

- Welcome Chung Liu, DEO
- Goals & Structure Matt Miyasato, Asst. DEO
- Incentives Vicki White, Program Supervisor
- Mobile Source Update Henry Hogo, Asst. DEO
- Health Effects Jean Ospital, Health Effects Officer
- Monitoring Philip Fine, Atm. Meas. Manager
- Framing Matt Miyasato

# Recent Air Quality

Max 8-hr Ozone (2006-2008 3-year average)

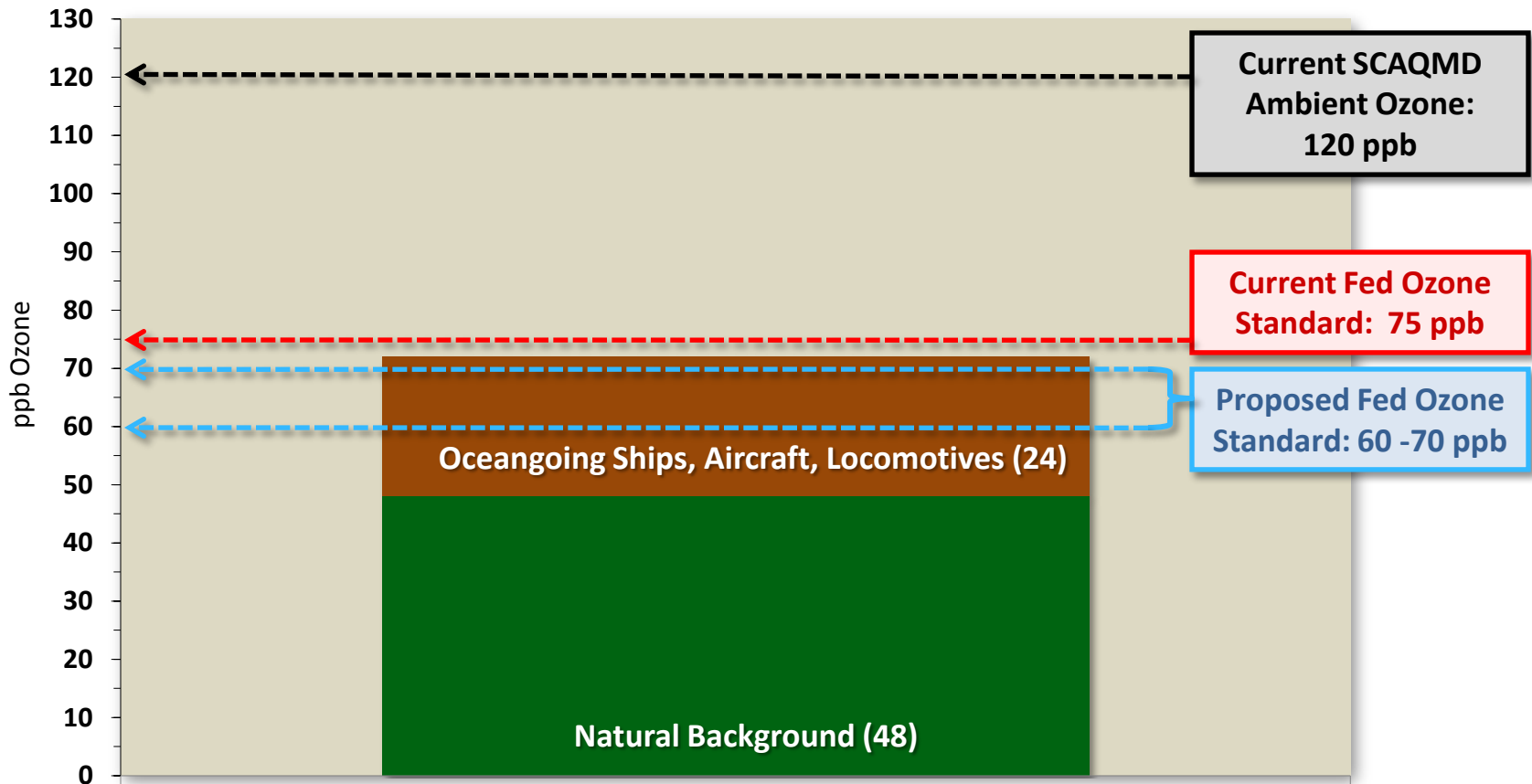




# 2030 Ozone: Source Contributions

*Background + Ships + Aircraft + Locomotives = 72 ppb*

(With majority Tier 4 Locomotives; Approx 75% Tier 3 Ships)



# Needed *Additional* NO<sub>x</sub> Reductions\*

by 2023: **75%**

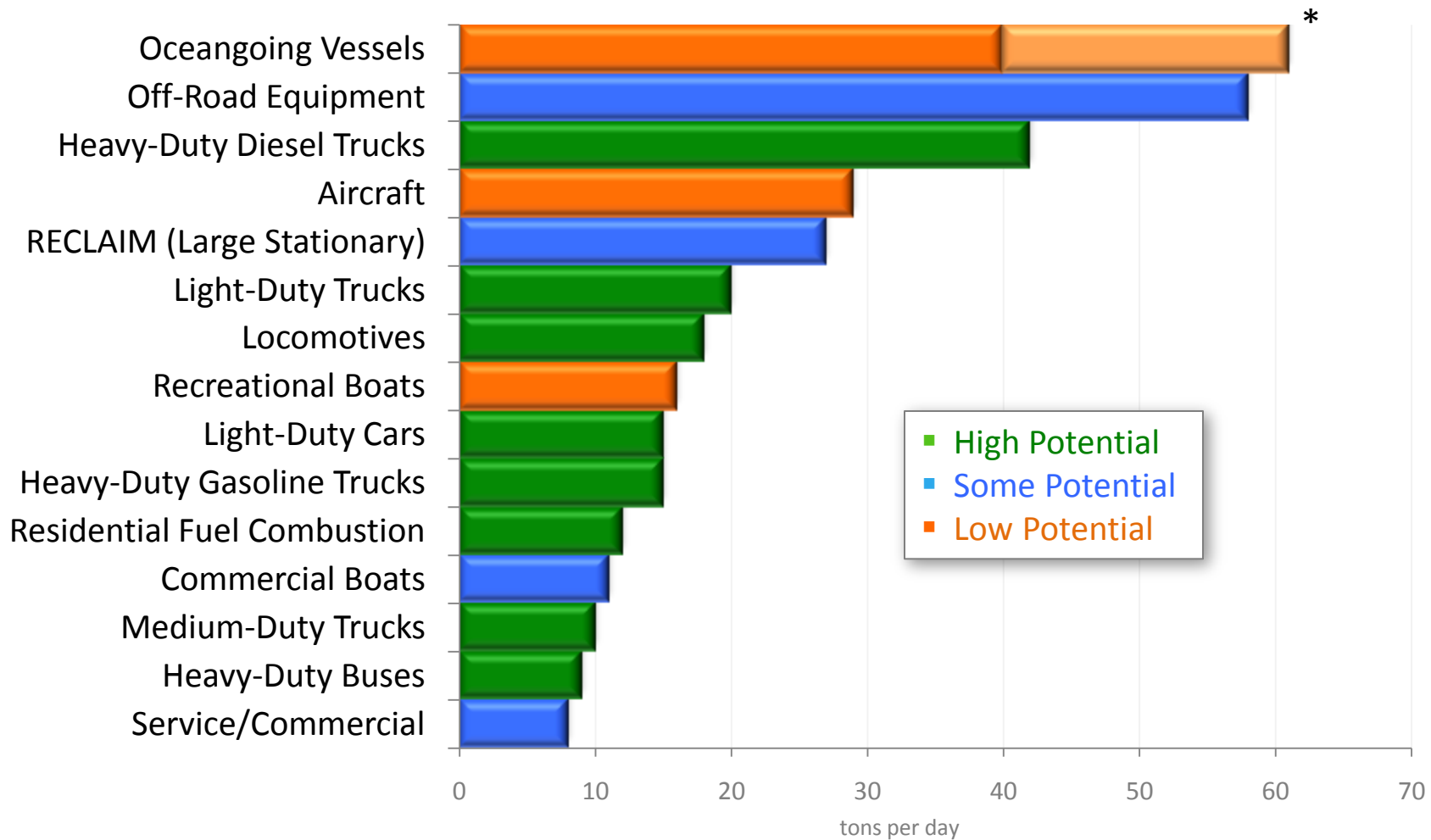
by 2030: **90%**

Requires broad  
deployment of zero-emission  
technologies, e.g. electric

\* Preliminary estimates based on 2007 AQMP assumptions



# Top 15 NOx Categories in 2023 and Technological Potential for Electrification / Zero-E



\* Preliminary emissions estimates; based on IMO Tier 1 – 3 for ocean vessels; EPA 2008 rule for locomotives; 2007 AQMP short-term measures for other. Range for oceangoing vessels based on varying deployment assumptions for IMO Tier 3 vessels.

# Agenda

## Session 1: Light- and Medium-Duty

- Introduction Dean Saito, On-Road Manager
- Light-Duty Dipankar Sarkar, Tech Demo Mgr
- Medium-Duty Jeff Cox, Air Quality Specialist
- Hydrogen Fueling Larry Watkins, Program Supvr
- EV Infrastructure Matt Miyasato, ADEO
- Feedback & Discussion All