

California Energy Commission

**DOCKETED**

14-IEP-1B

TN 72836

MAR 26 2014

# Transportation Transformation for Clean Air & Public Health

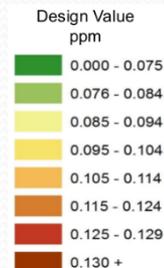
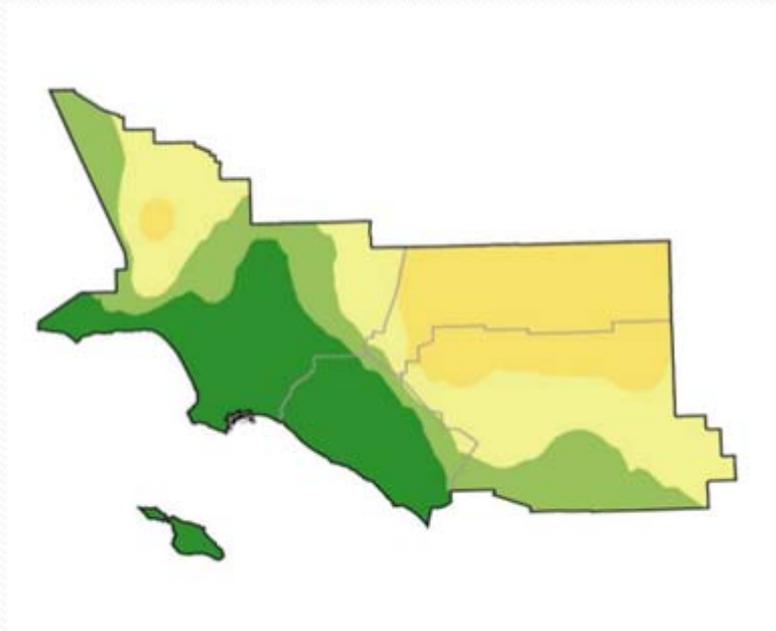
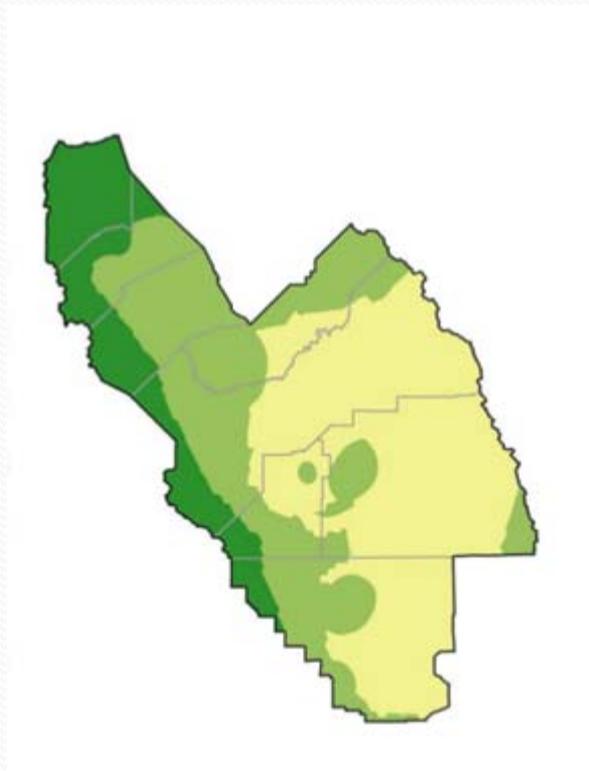
Sandra Berg  
Board Member, Air Resources Board

CEC IEPR Workshop  
March 27, 2014

California Environmental Protection Agency

 **Air Resources Board**

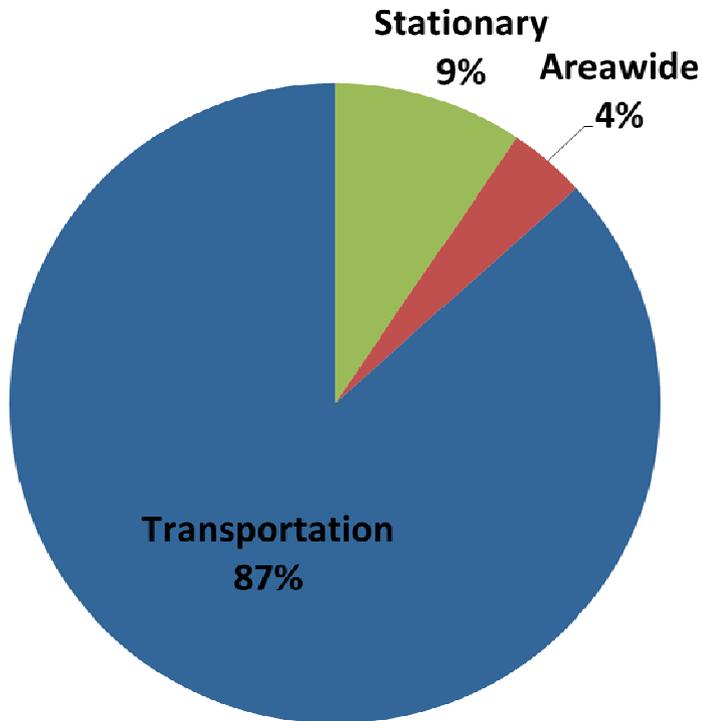
# Strong Progress ... Now for the Challenge



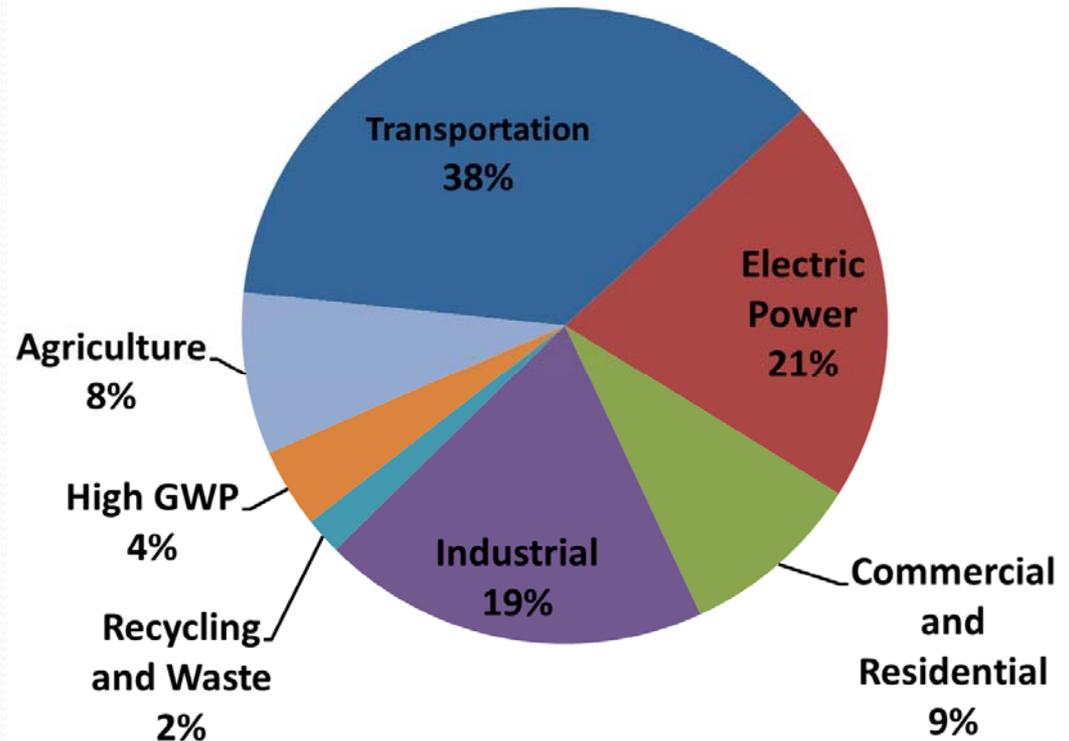
**2013 San Joaquin Valley and South Coast  
Ozone Levels**

# Transportation is a Key Driver

## South Coast NOx Emissions

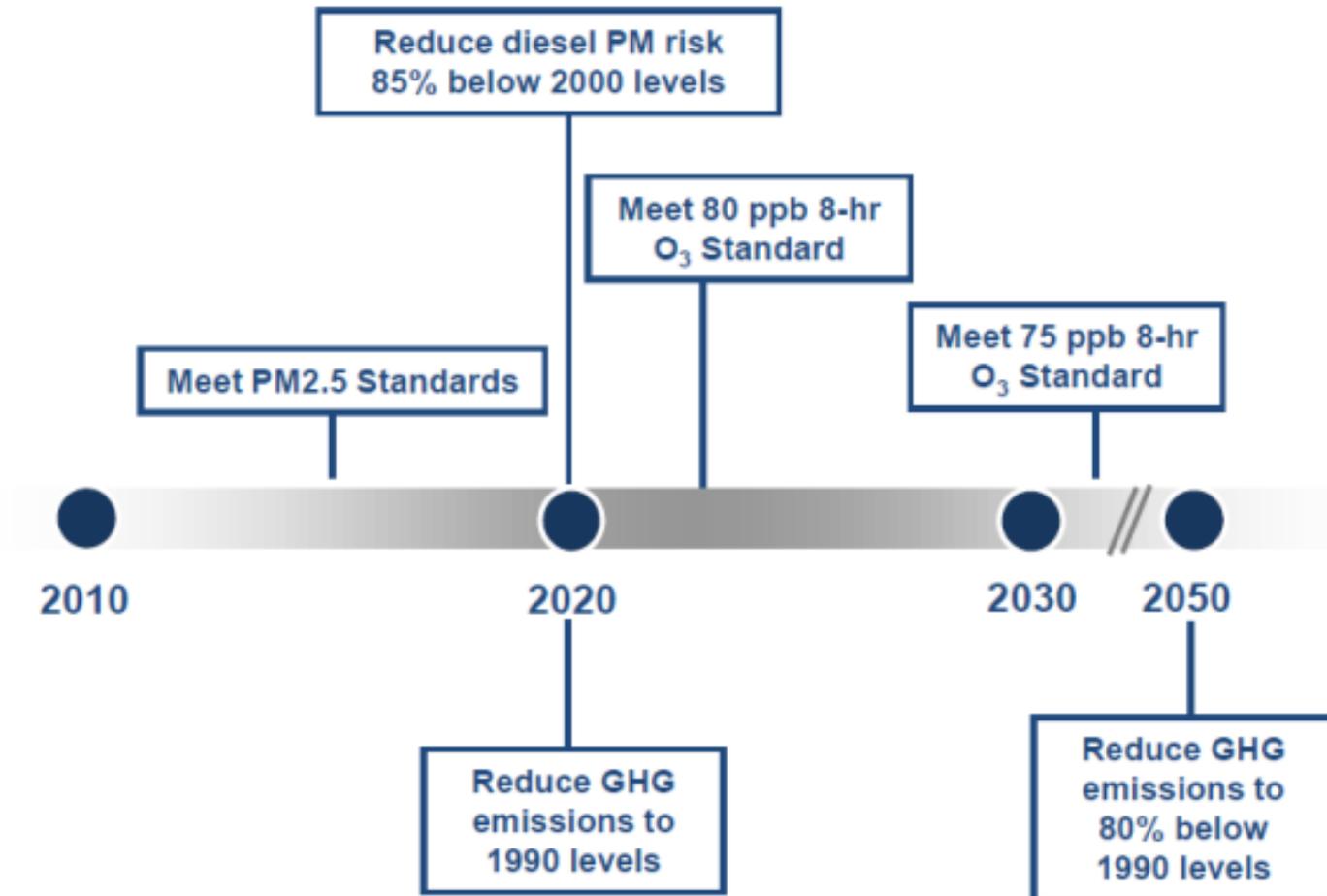


## Statewide GHG Emissions

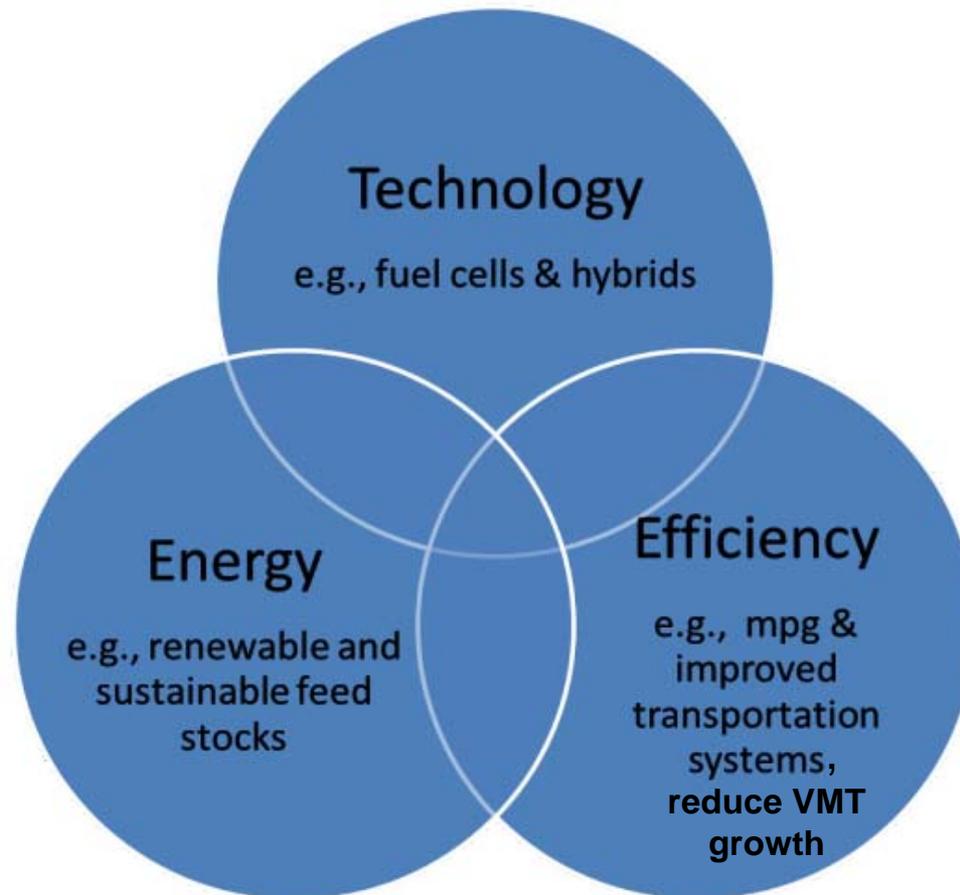


# 2020 Attainable...2050 Transformational

Timing is Critical & Requires Visionary Leadership



# Transformational Inter-Agency Effort Using Multi-faceted Portfolio Strategy



# Challenge is Innovation to Commercialization

## Why Transformation is the Path

***Let's take Light Duty Vehicles for Example.....***

### ***Vehicle Technology & Infrastructure***

- ~90% of today's fleet of ICE vehicles will need to transition to zero or near-zero technologies such as PHEVs, BEVs, and FCVs along with the infrastructure and consumer behavior to support such a dramatic change.

### ***Fuels***

- Electric grid – meeting growing demand AND cleaner than 2020 target
- High volume of innovative fuels such as biofuels to meet the demand of the new transportation technology and energy needs in a low carbon lifestyle.

### ***Lifestyle – Reduce VMT Growth***

- Plan and build sustainable communities to reduce VMT growth
- Innovative smart transportation/mobility options to reduce VMT growth

# Momentum, Momentum, Momentum

## Closing the Gap to Commercialization

- **Transformative Mobility** through alternative vehicles, fuel markets and smart mobility which need to be launched over the next 5-10 years with growth (2025-2050) comparable to that of the *IT* world...think *iPhone*.
- **Transformative Industries/Markets** through encouraging, supporting and rewarding key innovation.
- **Transformative Citizen/Consumers & Infrastructure**
- **Transformative Leadership** to envision and develop strategic, purposeful, integrated, dynamic, clear, multi-stakeholder public policy.



“We can not solve our problems  
with the same thinking we used  
when we created them.”

- Albert Einstein