#### GHG Mitigation Opportunities under CEQA

#### Board of Directors Santa Barbara County Air Pollution Control District

Our Mission: To protect the people and the environment of Santa Barbara County from the effects of air pollution.

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## District Role under CEQA

- Typically reviews and comments for land use agencies
- Provides technical support
  - Evaluating air quality impacts
  - Identifying applicable requirements
  - Evaluating mitigation measures
- Implements off-site mitigation measures



# **Mitigation Overview**

- Criteria for mitigation (GHG / Criteria / Toxics)
  - Reduce impacts

- Enforceable
- Nexus Roughly proportional
- GHGs are different than criteria or toxic pollutants
  - Criteria/toxic pollutants local impacts, local mitigation
  - GHGs global impacts, more mitigation options
- GHG mitigation can also mitigate criteria, toxic, and other impacts



# Applying GHG Mitigation

- Prioritize on-site mitigation
- Then mitigation near the site
- Then mitigation within California
- Then mitigation from further away



## Local Mitigation Opportunities

- Proposing a range of measures for consideration
- Sources of ideas
  - Current APCD Programs
  - Statewide Initiatives ARB, CEC, CAPCOA
  - Scoping Plan Update suggested local measures
  - Local Support
- Consider: implementation, co-benefits, risks, challenges



## **Mobile Source Incentives**

- Zero-Emission Vehicle Rebates
  - Consumer program
  - Model on Clean Vehicle Rebate Project
- Zero-Emission Busses
  - School busses or transit busses
- Vessel Speed Reduction
  - Expand existing program must ensure no speed-up





#### Zero-Emission Vehicle Infrastructure

- Battery-Electric Charging Infrastructure
  - Expand existing District program
  - Pay portion of installation cost
- Fuel-Cell-Electric Vehicle Infrastructure
  - Model on Energy Commission grants
  - Pay for installation, support initial operation
  - Include renewable hydrogen component





## **Carbon Sequestration**

- Urban Forest Projects
  - Planting/maintaining trees
  - Improves building energy efficiency
- Carbon Farming



- Includes compost additions and a host of other measures
- Soil and water quality benefits
- Demonstration projects currently underway



## **Building Retrofits**

- Energy Efficiency
  - Insulation, upgrades, appliance replacements, etc.
  - Long-term energy and cost savings
- Solar Power
  - Reduce up-front costs of systems
  - Displaces grid electricity





#### **Case-Study Assumptions**

\$1,000,000 invested 15% admin cost



Mitigation Type	Quantity	Units	Mitigation Life	Total Reductions (MTCO2e)
Battery Electric Vehicle Charging Infrastructure	85	Stations	15	14,572
Zero-Emission Vehicle Rebates	340	Cars	15	14,777
Zero-Emission Busses	4	Busses	15	1,048 - 5,027
Urban Forests	8,500	Trees Planted	25	3,741
Fuel Cell Electric Vehicle Infrastructure	1/3	Station	15	3,325
Carbon Farming (Compost)	683	Acres	20	20,368
Building Retrofits - Energy Efficiency	567	Buildings Retrofit	15	8,160
Building Retrofits - Solar	567	Buildings Retrofit	15	14,405
Vessel Speed Reduction	425	Vessels Slowed	1	8,563

# **Recurring Themes**

- Potential local co-benefits:
  - regional air quality, economic, environmental
- Existing programs which could be expanded
- Potential for new programs
- Tools available to quantify impacts



### Next Steps

- Solicit input other options, feedback
- Workshop
- Support analysis of specific proposals for specific projects
- Assist in:
  - Implementing measures (where appropriate)
  - Monitoring and Reporting Plans
  - Verifying reports



#### **Questions?**

