

# California Climate Investments

## Environmental Justice Advisory Committee



April 2016



# California Climate Investments

Comprehensive and coordinated investments throughout California that further the State's Climate goals and deliver economic, environmental and public health co-benefits.



# Cap-and-Trade Program: Source of Auction Proceeds

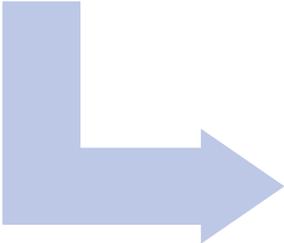
- Declining limit on GHG emissions, establishes a price signal for long-term investments in cleaner fuels and more efficient energy use
- Electricity and industrial sources included in 2013; fuel providers included in 2015
- Auction component generates proceeds for investments
  - Over \$4 billion generated for California Climate Investments as of March 2016
  - Also generate funds for California Climate Credit

# California Climate Investments Program Design and Structure

# California Climate Investments – Program Structure

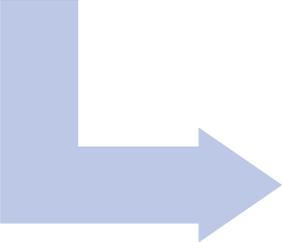
## Governor and Legislature

- Informed by Investment Plan
- Governor Proposes Budget
- Legislature Appropriates Funds



## State Agencies

- CalEPA Identifies Disadvantaged Communities
- ARB Provides Guidelines & Quantification
- State Agencies Develop Programs



## Programs

- Projects are Funded
- Agencies Report on Outcomes

# Statutory Requirements

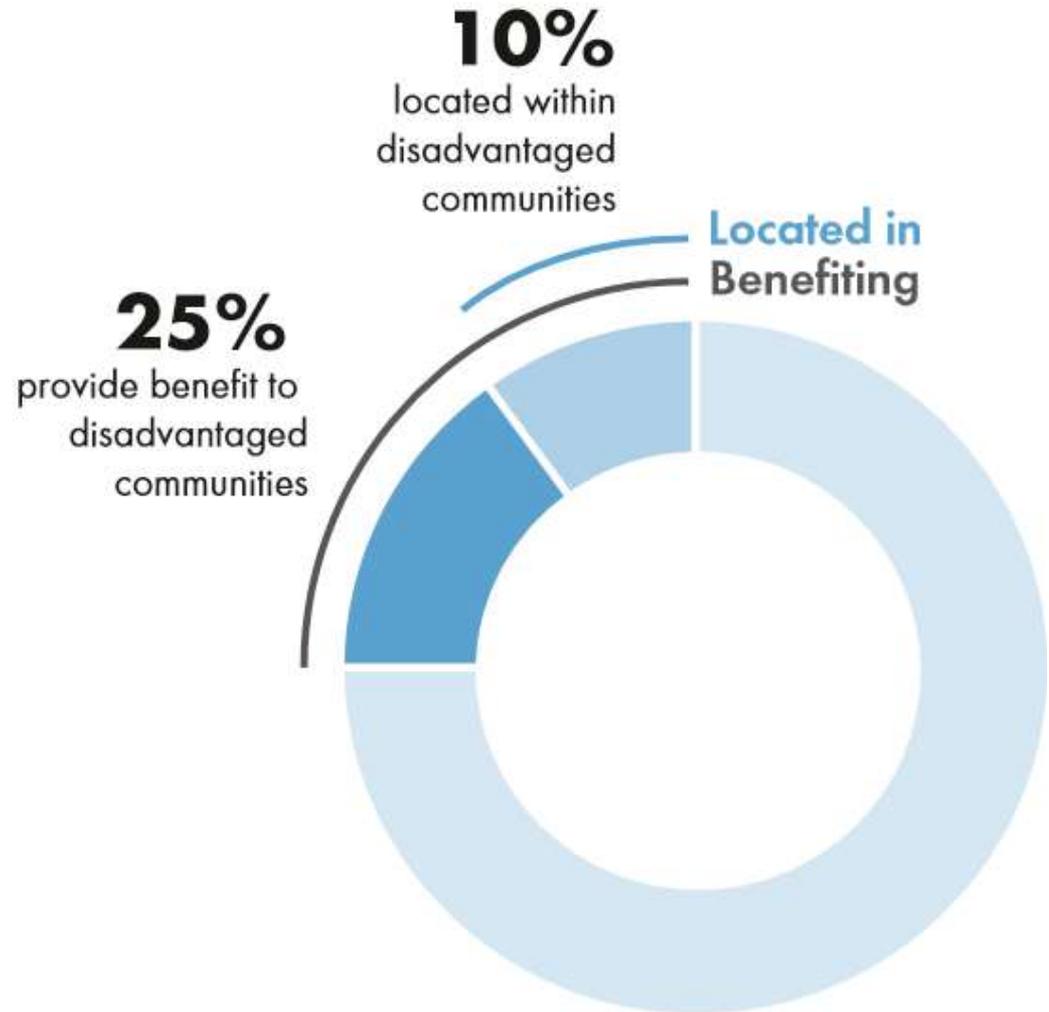
1. Reduce GHG emissions

2. Direct investment toward the most disadvantaged communities in the State

3. Maximize economic, environmental, and public health benefits to the State

# Senate Bill 535

- Sets disadvantaged community targets (floors)
- CalEPA identifies disadvantaged communities
  - CalEnviroScreen

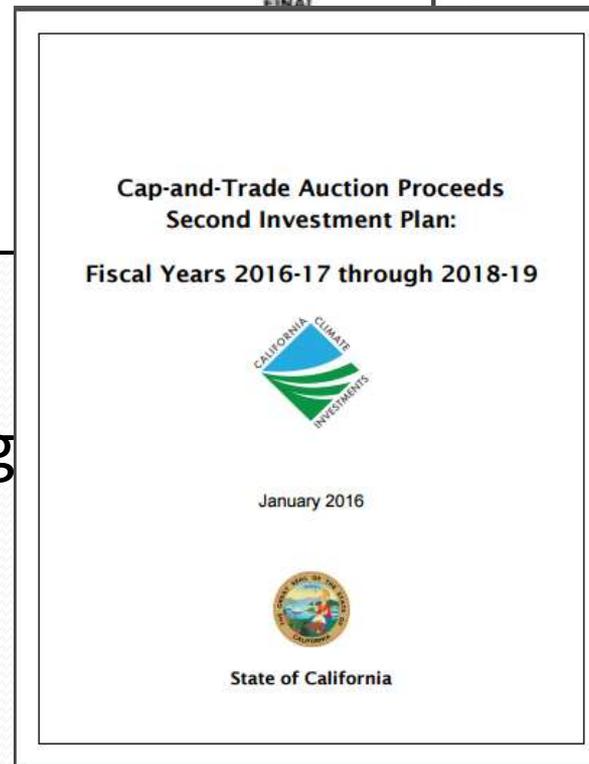
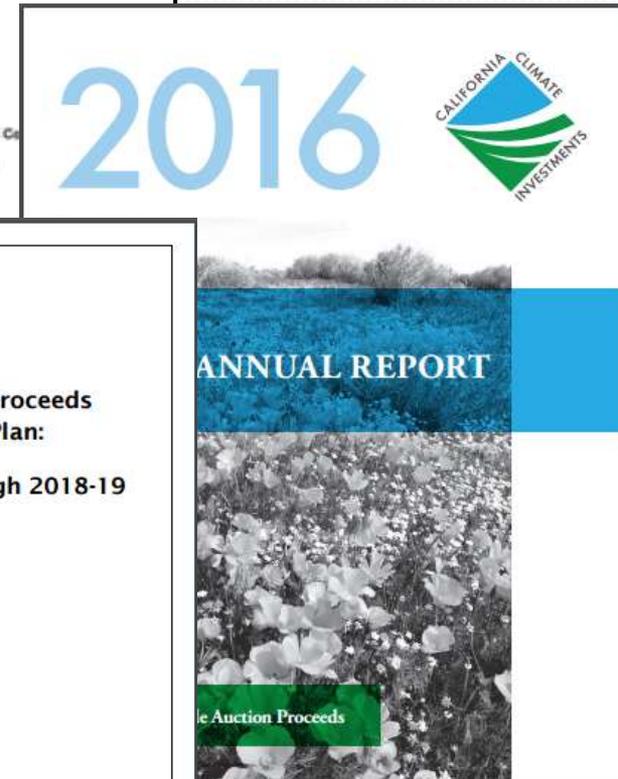
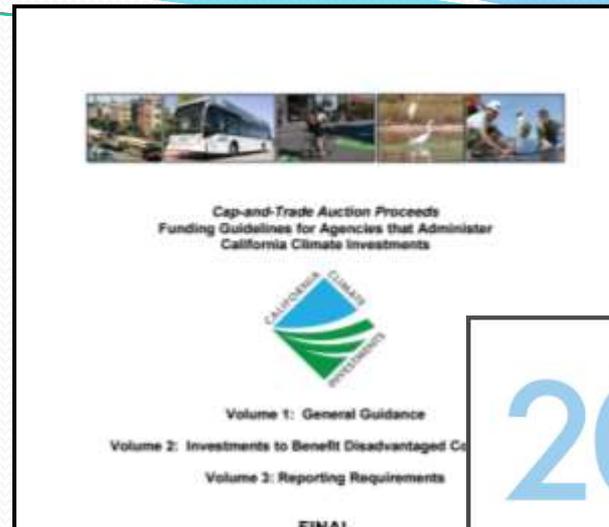


# Maximize economic, environmental, and public health benefits

- Foster job creation by promoting in-State GHG emission reduction projects carried out by California workers and businesses
- Complement efforts to improve air quality
- Provide opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce GHG emissions
- Lessen the impacts and effects of climate change on the State's communities, economy, and environment

# ARB

- Assist Overall Administration
  - Investment Plan
  - Annual Report
- Provide Guidance
  - Funding Guidelines
  - Quantification
  - Reporting and tracking
- Administer Low Carbon Transportation Program



# State Agencies

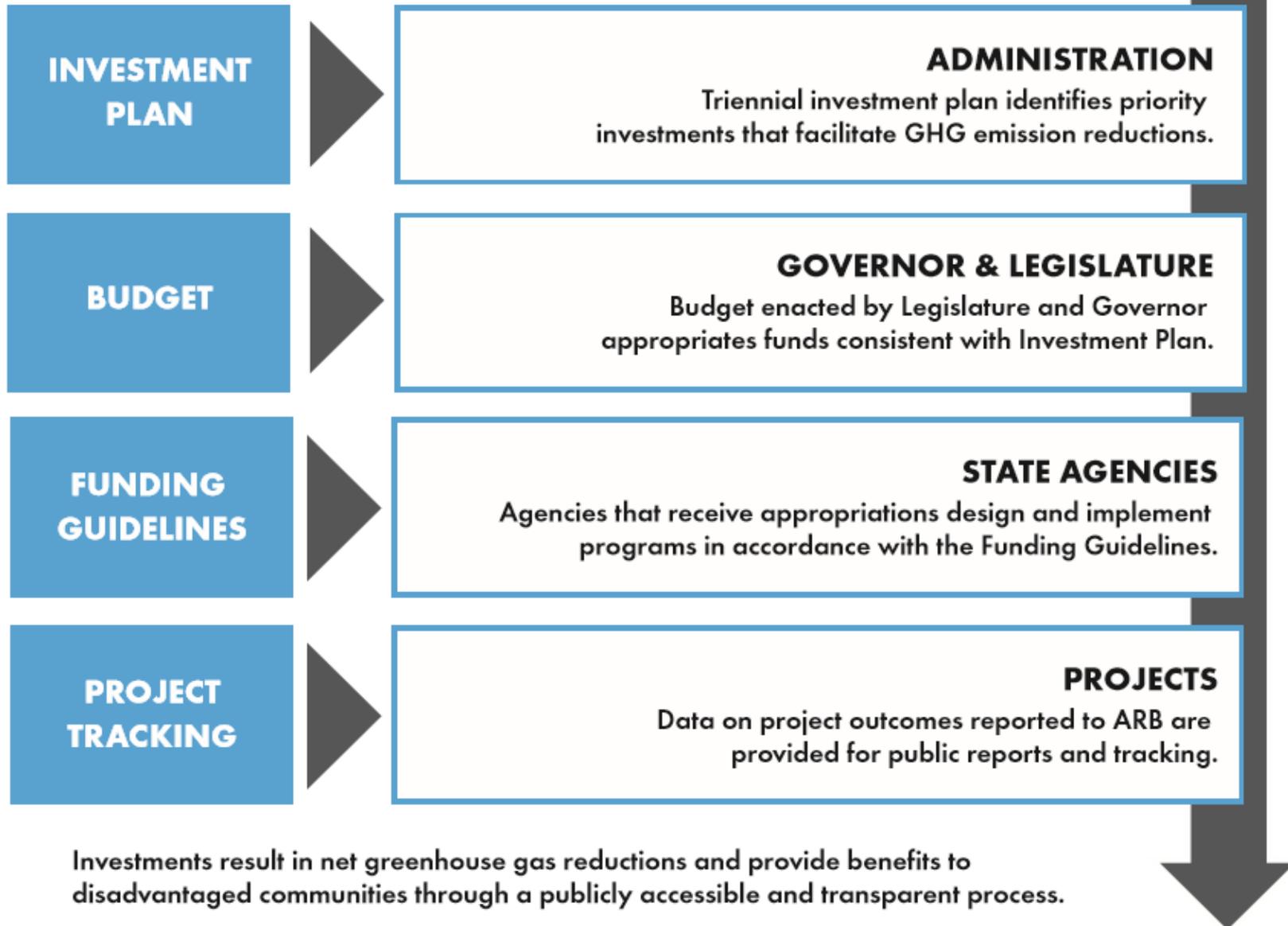
14 Administering Agencies- each must:

- Design and implement programs
  - Meet statutory requirements
  - Meet ARB Funding Guidelines
- Select projects for funding
- Ensure projects achieve GHG emission reductions
- Quantify GHG reductions
- Document co-benefits
- Track and report on funded projects



California  
Strategic Growth Council





# ARB Funding Guidelines

- Funding guidelines for agencies to **ensure statutory requirements** are met, including
  - Accountability and transparency
  - Project tracking and reporting requirements
  - Guidance on maximizing benefits for disadvantaged communities



# SB 535 Project Criteria Example

- Projects must provide a direct, meaningful, and assured benefit, as well as meaningfully address an important community need.
- Projects must meet at least one of the criteria in Funding Guidelines
  - Criteria example: *Project provides incentives for vehicles or equipment that reduce air pollution on fixed routes that are primarily within a disadvantaged community (e.g., freight locomotives) or vehicles that serve transit stations or stops in a disadvantaged community (e.g., zero-emission buses)*

# Public Input on Funding Guidelines

- 12 workshops; multiple stakeholder meetings
- Over 80 written comments
- 2 ARB Board hearings
- Final round of revisions addresses comments on:
  - Public transparency
  - Outreach and technical assistance
  - Maximizing disadvantaged community benefits and meeting community needs

# Quantification Methods

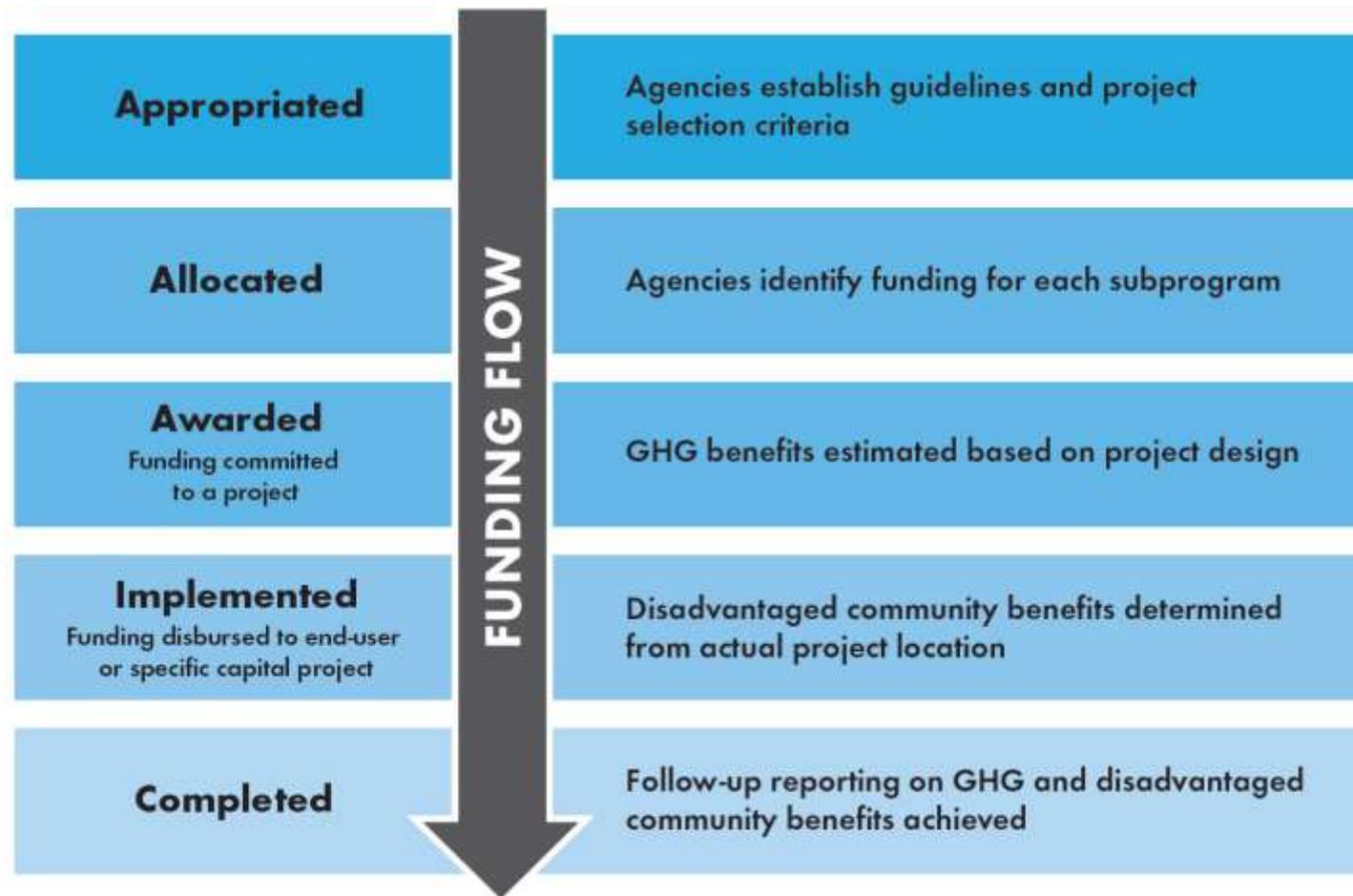
- ARB responsible for guidance on quantifying GHG benefits
- Must be uniform, robust, and accessible
- Methods for 50+ project types released through 2015
- Development process includes:
  - Empirical literature reviews
  - Significant coordination with state agencies
  - Input from academic institutions and other experts
  - Public review and feedback
  - Regular updates and improvements

# California Climate Investments 2016 Annual Report

Program and Project Outcomes

<b>Current Appropriations (\$M)</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
HSRA - High Speed Rail	\$ 0	\$ 250	\$ 600
CalSTA - Transit and Intercity Rail Capital	\$ 0	\$ 25	\$ 240
Caltrans - Low Carbon Transit Operations	\$ 0	\$ 25	\$ 120
SGC – Afford. Housing/Sustainable Communities	\$ 0	\$ 130	\$ 480
ARB - Low Carbon Transportation	\$ 30	\$ 200	\$ 95
CSD – Residential Weatherization/Solar	\$ 0	\$ 75	\$ 79
CEC - Energy Efficiency for Public Buildings	\$ 0	\$ 20	\$ 0
DWR – Water Energy Efficiency	\$ 30	\$ 20	\$ 20
CDFA - Agricultural Energy Efficiency	\$ 10	\$ 25	\$ 40
CDFW - Wetlands and Watershed Restoration	\$ 0	\$ 25	\$ 2
CALFIRE - Fire Prevention/Urban Forestry	\$ 0	\$ 42	\$ 0
Cal Recycle - Waste Diversion	\$ 0	\$ 25	\$ 6
<b>Total</b>	<b>\$ 70M</b>	<b>\$ 862M</b>	<b>\$ 1,682M</b>

# Funding Flow and Terminology



# Summary of Funding Status

**\$2.6 BILLION** appropriated through 2015

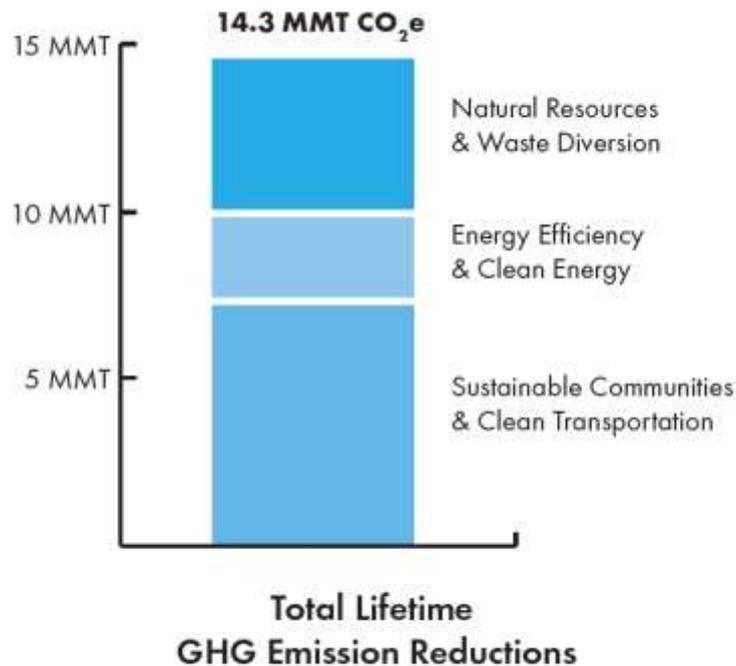
**\$1.7 BILLION** awarded through 2015

**\$912 MILLION** implemented through 2015



# Greenhouse Gas Reductions

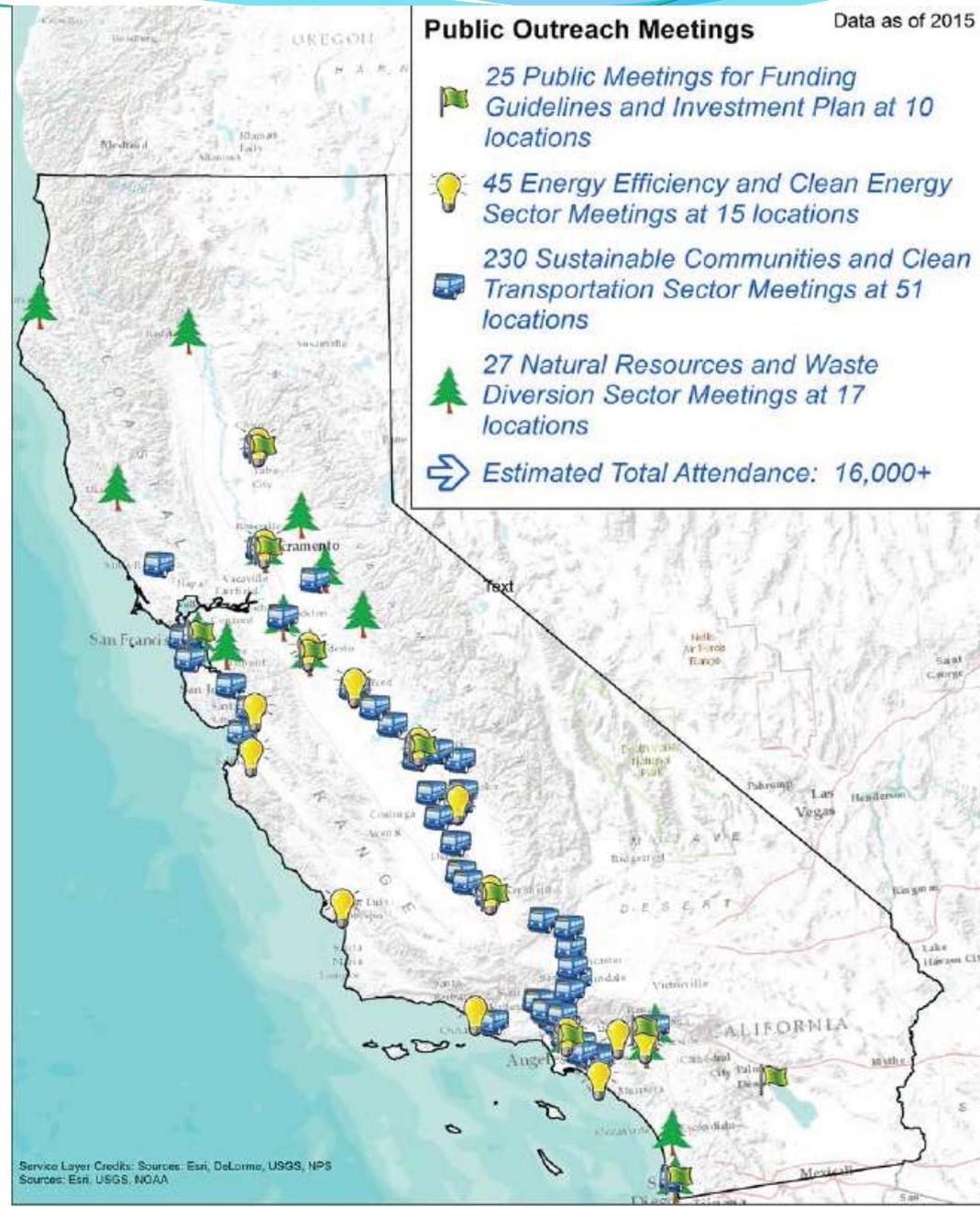
Lifetime GHG Emission Reductions  
from Awarded Projects by Sector (\$865M)\*



\*Estimates do not include High Speed Rail  
and cover other awarded projects through 2015

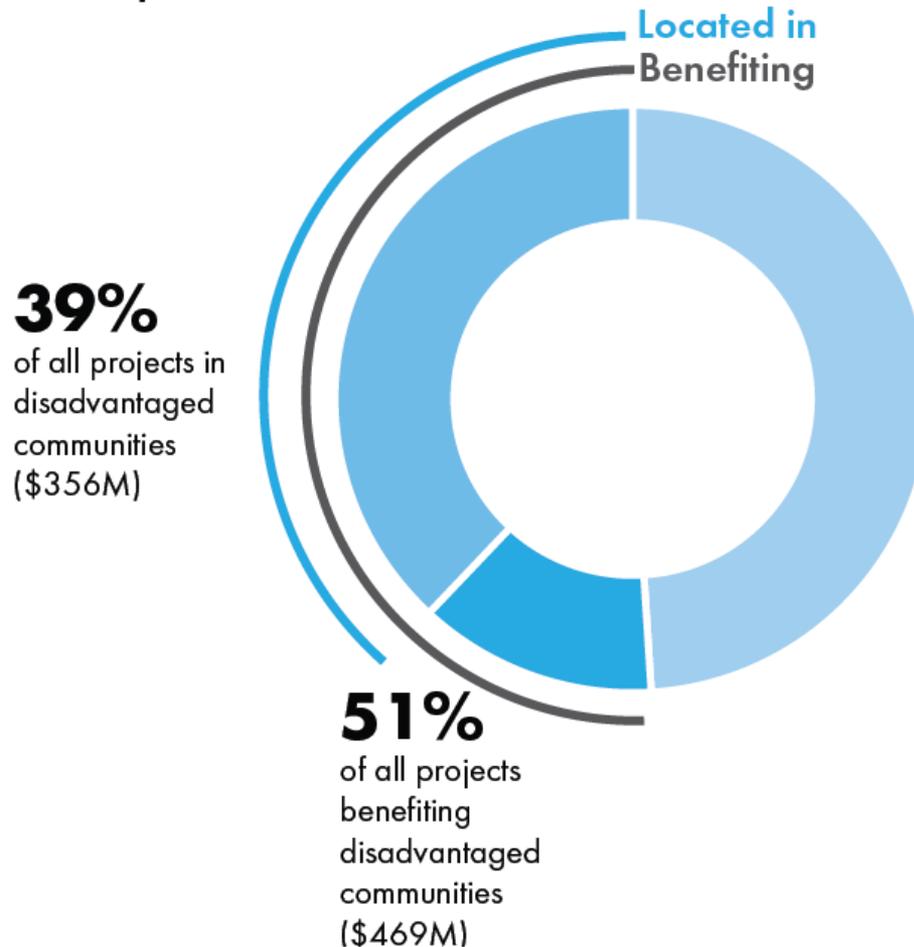
# Program Outreach

- Over 300 public meetings with over 16,000 participants



# Disadvantaged Communities

**Disadvantaged Community Investments Excluding High Speed Rail**  
*\$912M in Implemented Funds*



# Funding Within Disadvantaged Community Census Tracts



## Investments in Imperial:

- Low Income Residential Weatherization and Solar
- Zero emission vehicles



# Investment Summary by Sector

**Sustainable Communities  
& Clean Transportation**

**Energy Efficiency  
& Clean Energy**

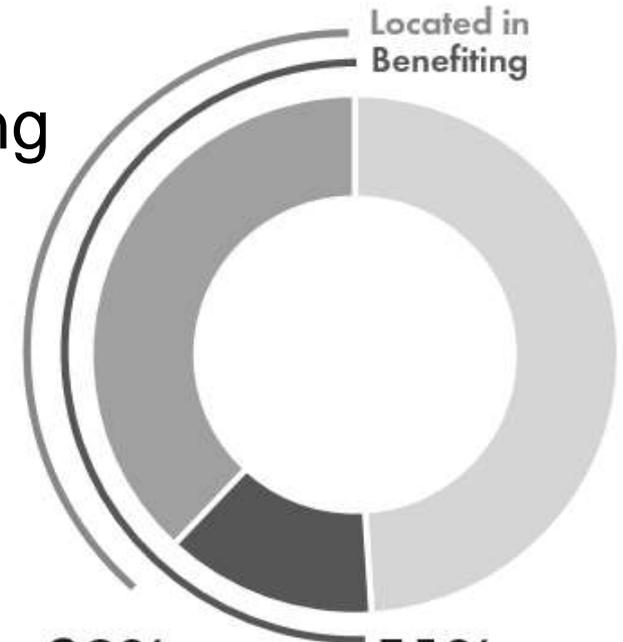
**Natural Resources  
& Waste Diversion**

# Sustainable Communities and Clean Transportation

**Sustainable Communities and Clean Transportation**

*\$817M Implemented | 63,300 projects*

- High Speed Rail
- Transit-Oriented Affordable Housing
- Active Transportation
- Transit and Connectivity
- Clean Vehicles
- Vanpools & Car Sharing
- Agricultural Land Conservation



**38%**  
of all projects in  
disadvantaged  
communities  
(\$308M)

**51%**  
of all projects  
benefiting  
disadvantaged  
communities  
(\$415M)



# Example Project:

## Zero Emission Vehicle Car Sharing

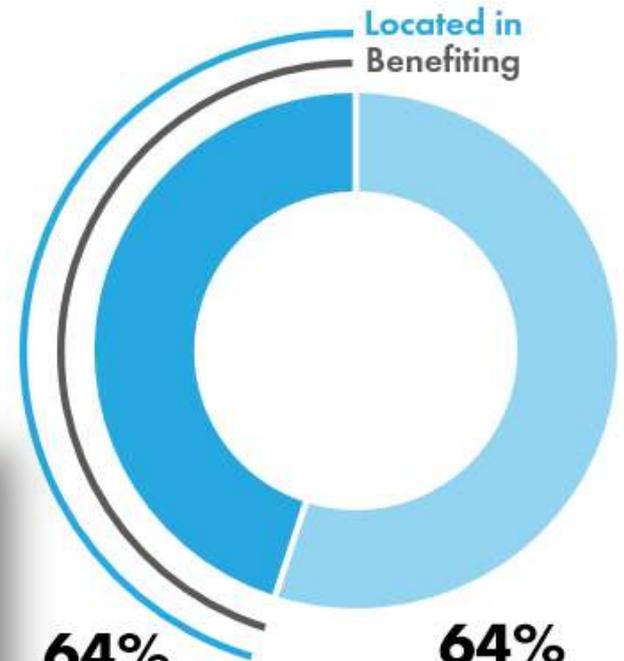
- Air Resources Board
- Car sharing and mobility options pilot
- GHG reductions through reduced vehicle miles traveled
- Targeted to benefit disadvantaged communities
- Criteria pollutant emissions reductions, petroleum reduction, enables market transformation of advanced technologies



# Energy Efficiency and Clean Energy

- Weatherization/Solar PV
- Renewable Energy
- Water–Energy Efficiency

**Energy Efficiency and Clean Energy**  
\$40M Implemented | 2,400 projects



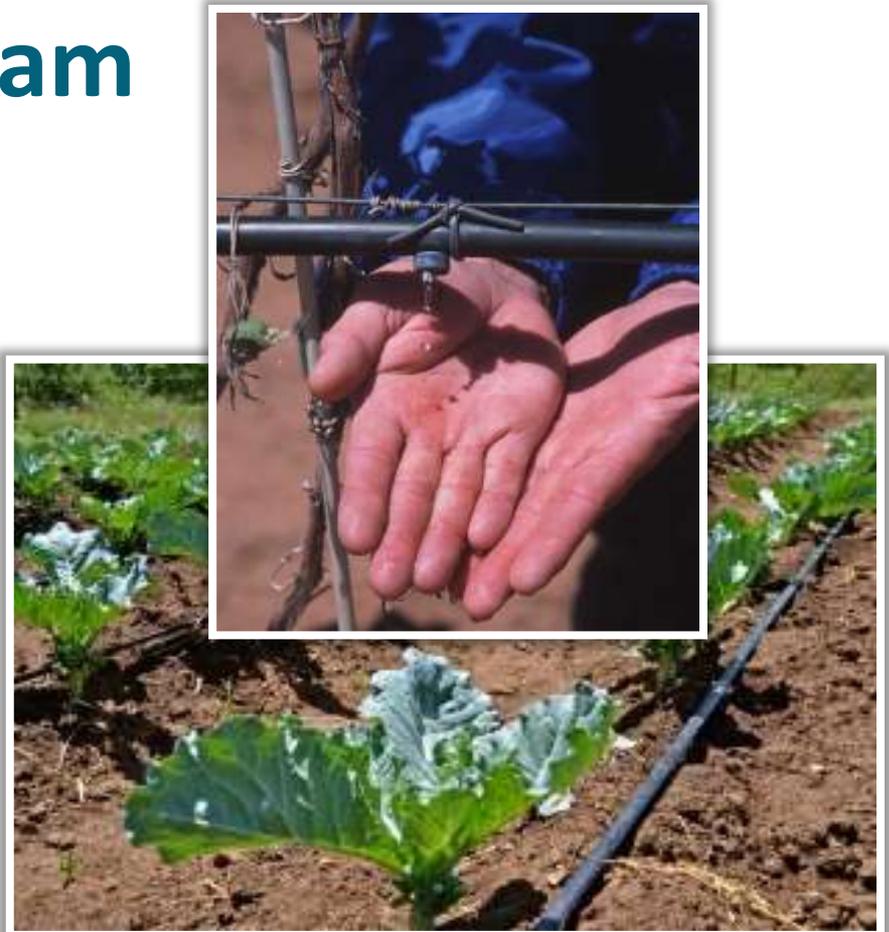
**64%**  
of all projects in  
disadvantaged  
communities  
(\$26M)

**64%**  
of all projects  
benefiting  
disadvantaged  
communities  
(\$26M)



# Example Project: State Water Efficiency and Enhancement Program

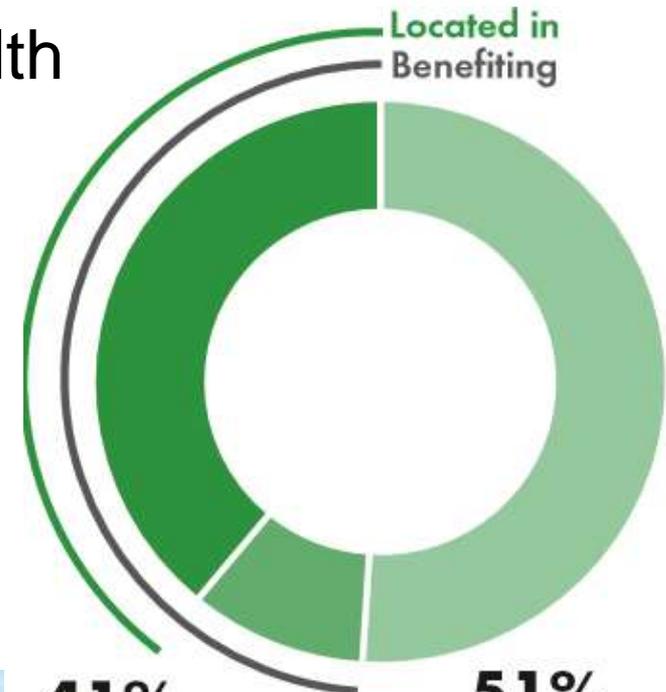
- California Department of Food and Agriculture
- Irrigation and water pumping systems
- GHG reductions from increased energy efficiency and reduced energy use
- Facilitates nutrient management and improves both air and water quality



# Natural Resources and Waste Diversion

**Natural Resources & Waste Diversion**  
\$54M Implemented | 53 projects

- Urban Forests and Forest Health
- Wetlands Restoration
- Waste Diversion



**41%**  
of all projects in  
disadvantaged  
communities  
(\$22M)

**51%**  
of all projects  
benefiting  
disadvantaged  
communities  
(\$28M)



# Example Project: Urban Forestry Program

- CAL FIRE
- Urban tree planting
- GHG reductions from carbon sequestration in trees and reduced building energy use
- Urban greening, reduced energy bills, improved air and water quality



# For More Information



- Links and info on all programs
- Upcoming events for each agency
- Reports and Guidance documents

## Auction Proceeds Funded Programs and Events

### Transportation and Sustainable Communities Funding

Agency / Department	Program and Potential Investment Types	Funding To Date	Upco
<b>Strategic Growth Council</b>	<i>Affordable Housing and Sustainable Communities (AHSC) Program</i> <ul style="list-style-type: none"><li>• Transit-oriented development</li><li>• Intermodal affordable housing</li><li>• Transit capital projects</li><li>• Active transportation/complete streets</li><li>• Local planning and implementation</li></ul> <i>Sustainable Agriculture Land Conservation (SALC) Program</i> <ul style="list-style-type: none"><li>• Agricultural land preservation</li></ul> <i>**ARB GHG Quantification Methodology for SGC AHSC Program</i>	\$130 million	
<b>Air Resources Board</b>	<i>Low Carbon Transportation</i> <ul style="list-style-type: none"><li>• Zero and near-zero emission passenger vehicle rebates</li><li>• Heavy duty hybrid/ZEV trucks and buses</li><li>• Freight demonstration projects</li><li>• Pilot programs (car sharing, financing, etc.) in disadvantaged communities</li></ul>	\$230 million	Questions from the J Applicant / Zero-Emission Truck Den Solicitation August 21

Web: [www.arb.ca.gov/auctionproceeds](http://www.arb.ca.gov/auctionproceeds)

Email: [GGRFProgram@arb.ca.gov](mailto:GGRFProgram@arb.ca.gov)