

Carl Moyer Program 2006 Status Report



January 25, 2007

Mobile Source Control Division

California Air Resources Board
California Environmental Protection Agency

Background

Carl Moyer Program

- ◆ Incentive grants for SIP-creditable reductions
- ◆ Incremental cost of cleaner technology
 - Early or surplus emission reductions
 - Cost-effectiveness limit - \$14,300 per ton
- ◆ ARB-district partnership
 - ARB develops and adopts Guidelines
 - Districts retain flexibility in implementation

Legislative Changes

- ◆ Increased funding (Year 7)
 - Up to \$141 million annually through 2015
- ◆ PM and ROG added (Year 7)
 - Previously a NOx-only program
- ◆ New eligible source categories (Year 7)
 - Car scrap, fleet mod, Ag Assistance Program
- ◆ Increased funding for program administration (Year 9)

Status of Projects

- ◆ Projects must be completed in two years
 - Year 6 projects complete in June 2006
 - Year 7 and 8 projects underway
- ◆ Year 9 funds available
 - \$78 million in State grants to air districts
 - \$8.5 million for ARB Multi-District solicitation
 - \$50 million in additional motor vehicle fees



Program Benefits

Years 1 - 6

- ◆ Emission reductions achieved
 - 18 tons per day NO_x
 - One ton per day PM
- ◆ Cost-effectiveness of \$2,600/ton NO_x reduced
- ◆ Health and welfare benefits
 - 100 fewer premature deaths
 - 2,800 fewer asthma attacks
 - 17,000 fewer lost work days
- ◆ Benefit-to-cost ratio greater than 5:1



Environmental Justice

Years 4 - 6

- ◆ Bay Area, Sacramento, San Diego, San Joaquin Valley, and South Coast
 - \$28.7 million in project funding
 - 1,700 tons per year NO_x reductions
 - 80 tons per year PM reductions
 - Comparable cost-effectiveness with non-EJ projects

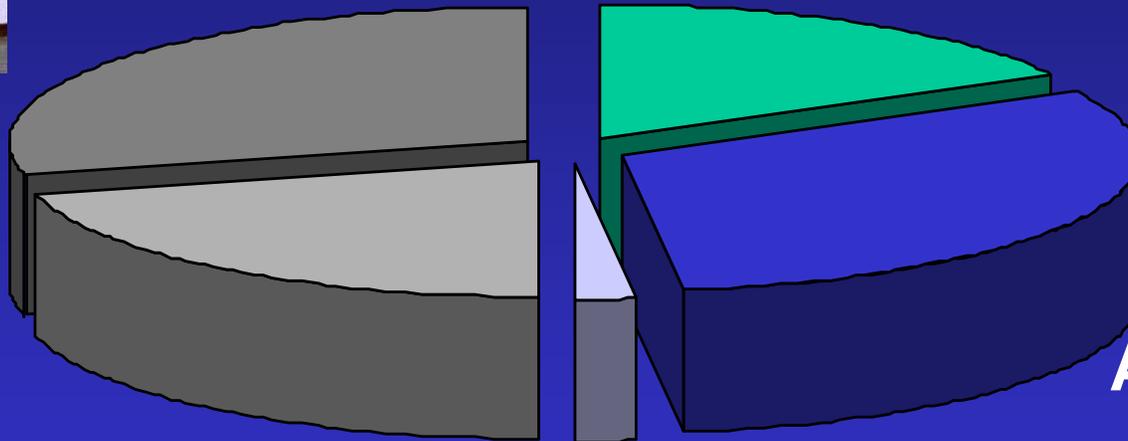


Projects Funded Years 1-6



On-Road
29%

Off-Road
17%



Ag Pumps
31%

Marine
21%

Locomotive
2%



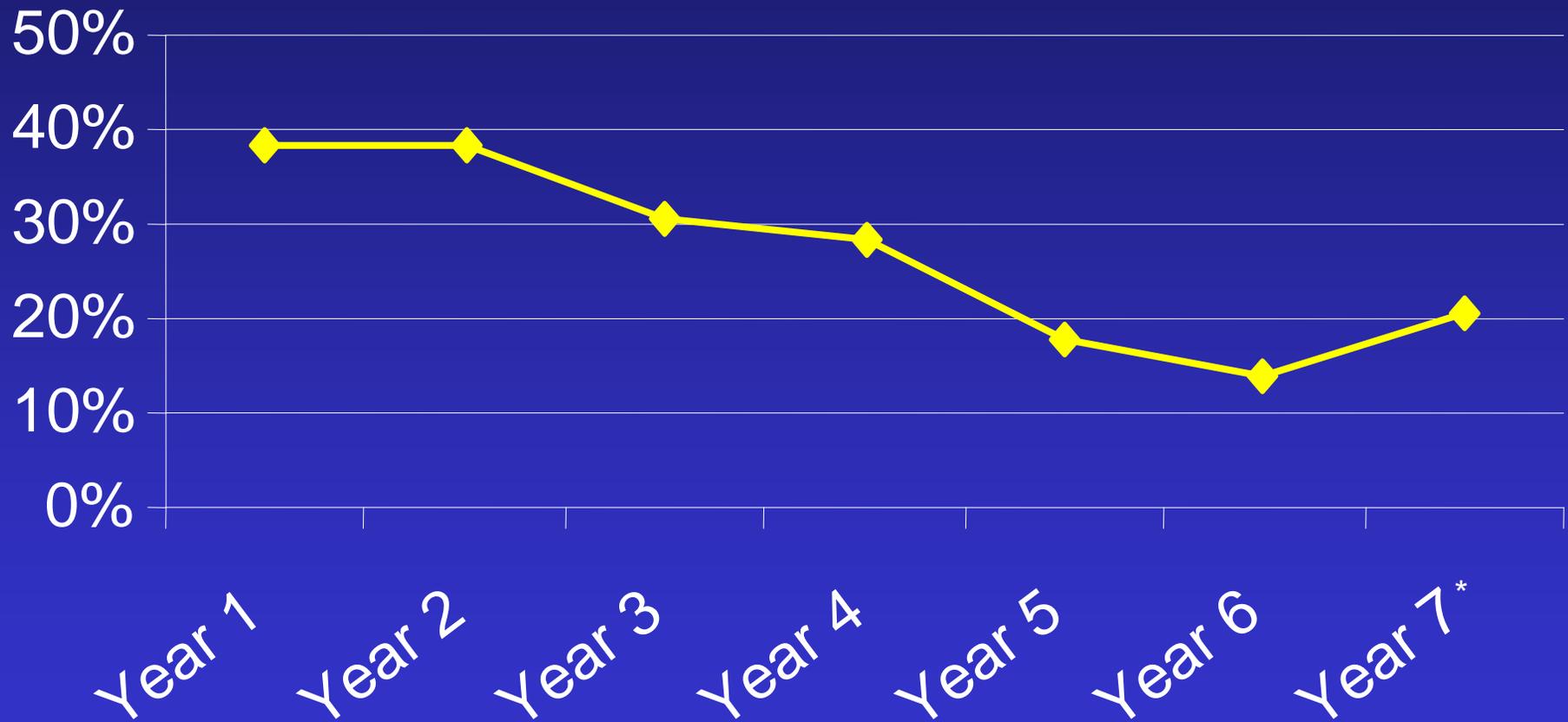


\$12,000-\$25,000 grant

\$7,000/ton

Project Funding Mix

On-Road Vehicles



* Year 7 data based on preliminary project information.

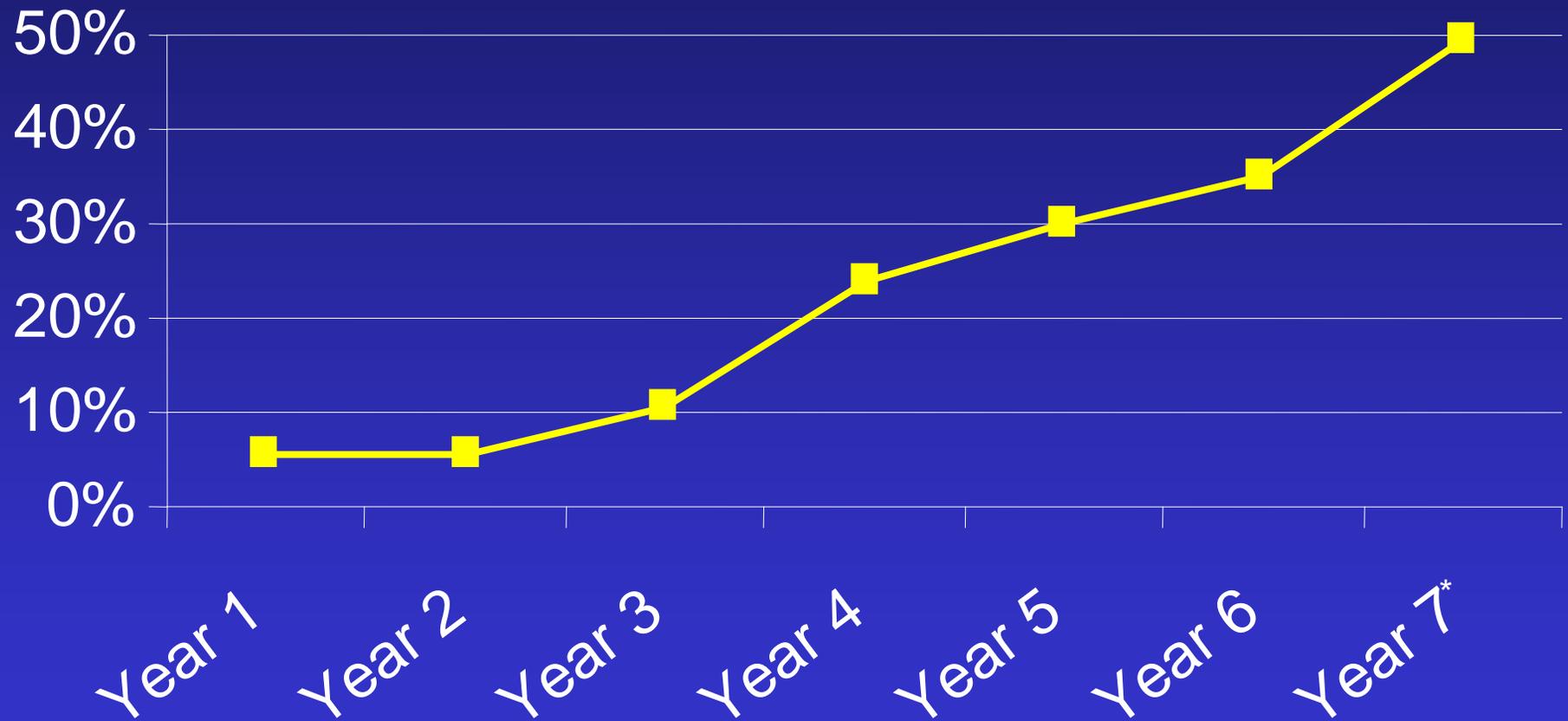


\$10,000-\$60,000 grant

\$3,400/ton

Project Funding Mix

Off-Road Equipment



* Year 7 data based on preliminary project information.

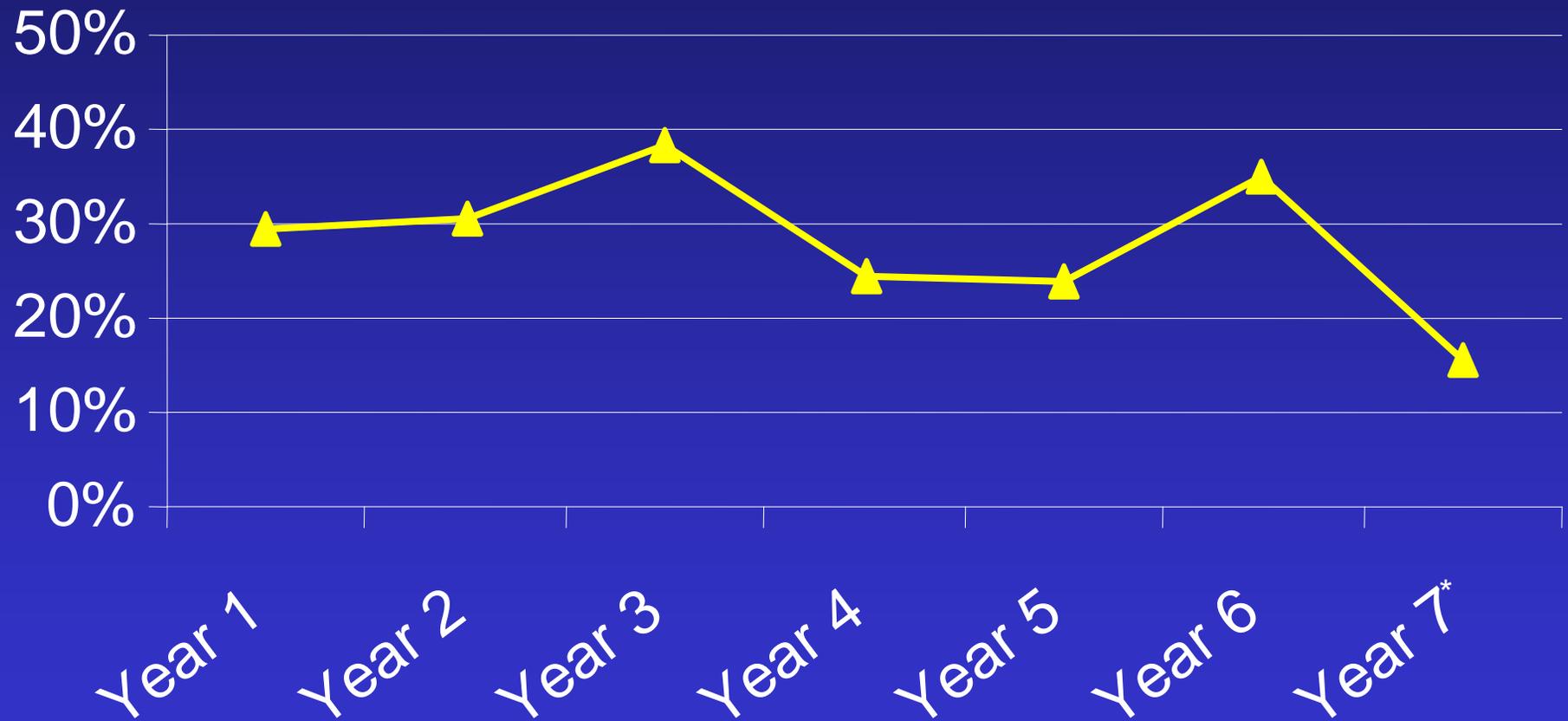


\$5,000-\$20,000 grant

\$2,200/ton

Project Funding Mix

Agricultural Irrigation Pumps



* Year 7 data based on preliminary project information.

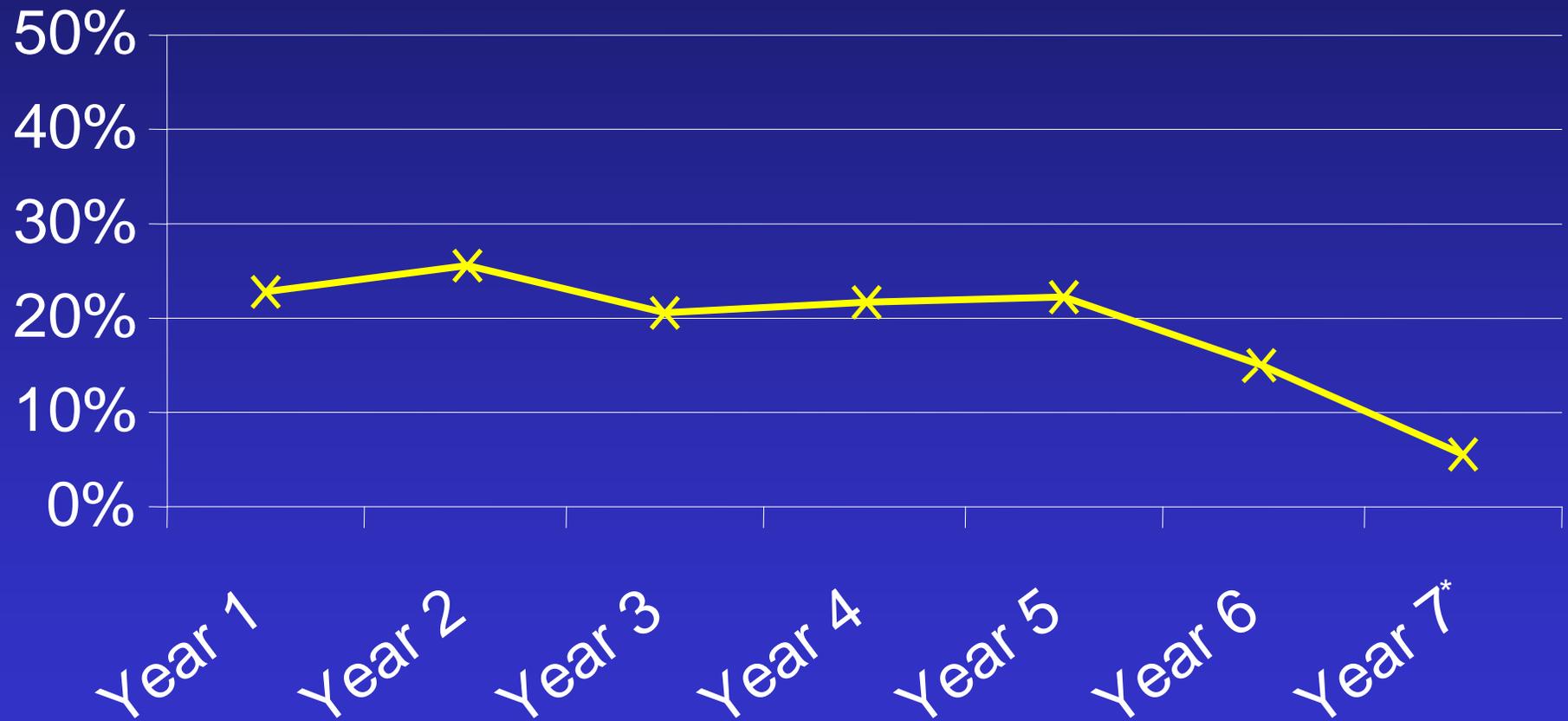


\$40,000-\$120,000 grant

\$1,800/ton

Project Funding Mix

Marine Vessels



* Year 7 data based on preliminary project information.

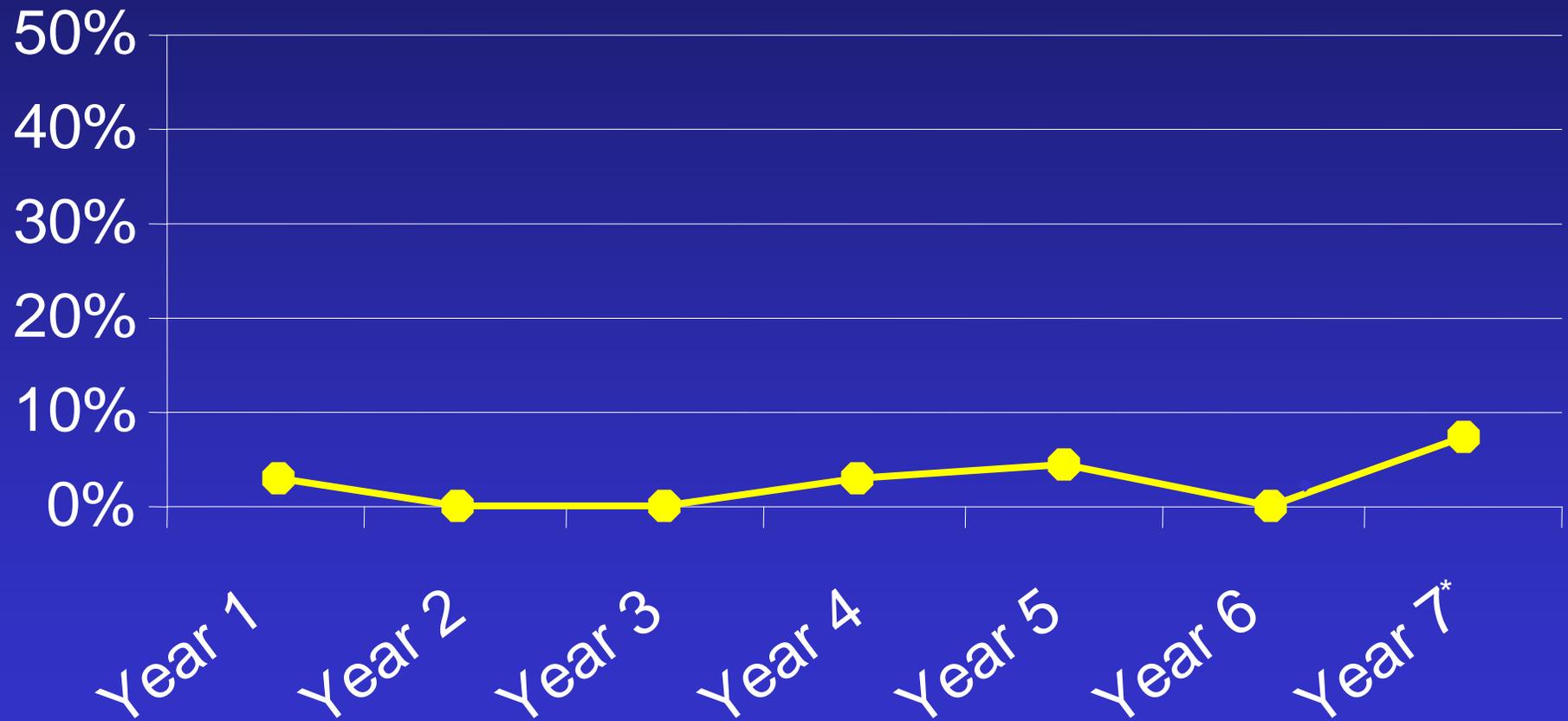


\$500,000-\$1 million grant

\$5,700/ton

Project Funding Mix

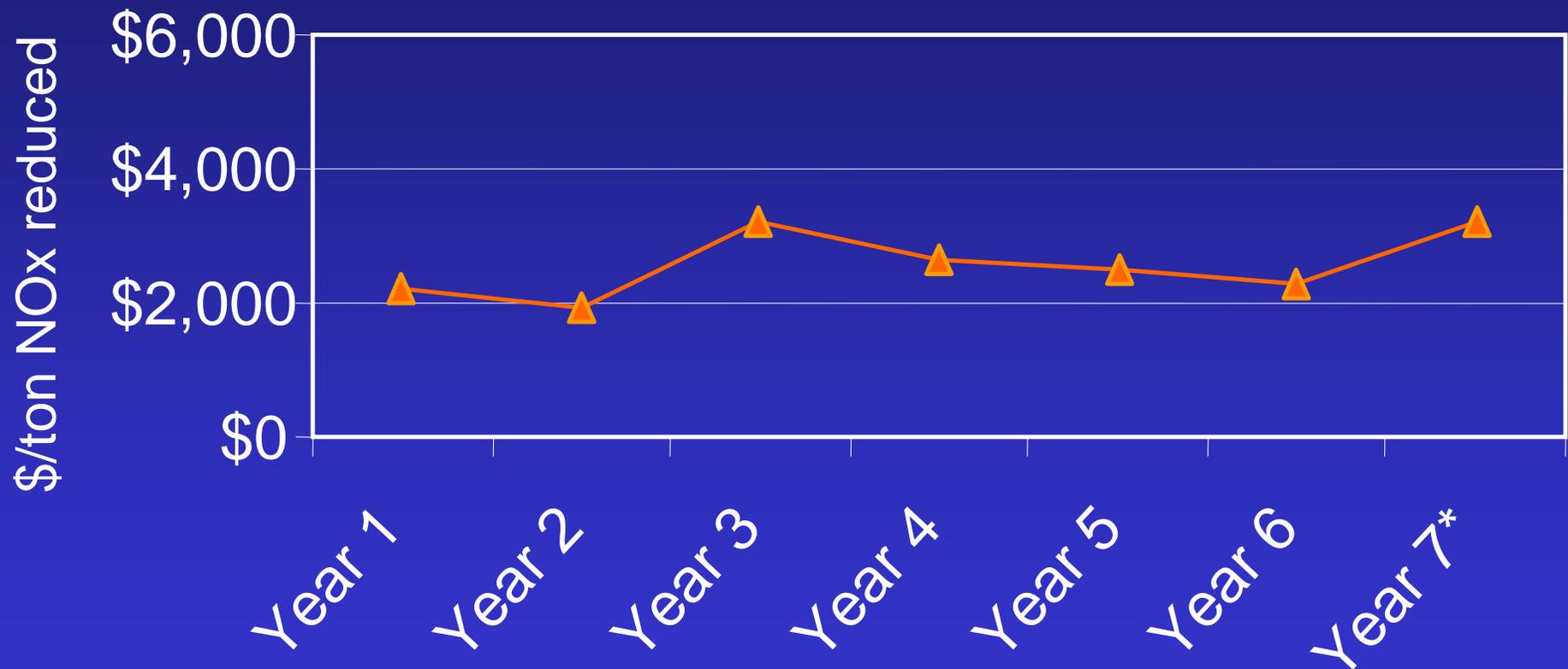
Locomotive



* Year 7 data based on preliminary project information.

Average NOx Cost-Effectiveness

Years 1-7



* Year 7 data based on preliminary project information.

SIP Emission Reductions

- ◆ Achieving federal standards require significant additional reductions
 - Much of CA non-attainment for 8-hour ozone
 - South Coast and San Joaquin Valley must attain PM_{2.5} standard by 2014
- ◆ Carl Moyer Program can complement regulations
 - 10 to 30 tpd NO_x reductions
 - 0.5 to 1.9 tpd PM reductions



Air District Audits

- ◆ Ventura, Sacramento and Butte air districts
 - Funds spent in a timely manner
 - Administrative issues addressed
- ◆ South Coast AQMD
 - \$10 million in Year 5 and 6 funds unexpended
 - District making changes to speed funding process
 - ARB follow-up audit in mid-2007

Site Visit Checklist

Engine ID: 10/21/07
District Project Number: 4187

Specific Engine Information
Directions for completing this form are as follows: Numbers 1-6 to be filled out from information found in district file. Gray areas to be filled out during engine inspection, and use one form for each engine being inspected (i.e. 6 engines from a project are being tracked = 6 engine forms to be completed)

1. District: SCAQMD

2. ARB Staff Reviewing File/Site Visit (print name): _____

3. Applicant Name: Affitech Contractors - 4187

4. Source Category (circle one): Off-road, Forklift, Locomotive, Marine, GSE, Ag Pump, Fleet Modernization, Idle, TRU, Infrastructure

5. Equipment type: Scraper

6. Project Type If Applicable (circle one): New, Repower, Retrofit

7. Table: Fill in the following Matrix for the engine selected to be inspected. If the information is the same in all documents fill in information in one cell and state "same" in all other cells.

	Application	Contract	Annual/Final Report (ARB)	Invoice(s)	Site Visit	All Columns Consistent? (if no, engine below)
a) Date of following item/action		<u>10/13/07</u>		<u>10/21/07</u> <u>ARB/ASC</u>		Y/N

Signature of ARB Staff Reviewing File: _____ Date of File Review: _____

State of California
Air Resources Board
MSCDOR/CAP_204

Other Program Evaluations

- ◆ Department of Finance Evaluation
 - Suggestions for improving effectiveness and accountability
 - Recommends areas to be more prescriptive
- ◆ Bureau of State Audits
 - Evaluating program effectiveness and efficiency
 - Includes South Coast, San Joaquin Valley, Sacramento, and Bay Area districts
 - Audit completion expected in Spring 2007

A Look Ahead

- ◆ New in-use engine regulations impact eligibility
 - Opportunities for early and surplus reductions
 - Also target exempt engines
 - ◆ \$1 billion goods movement air quality bond
 - ◆ New source categories
 - Light-duty gross polluter program
 - Off-road equipment fleet modernization
- Demand for projects expected to remain high

2007 Guideline Revisions

- ◆ Update project criteria
 - ◆ Update admin requirements
 - ◆ Incorporate latest technical information
 - ◆ Improve program efficiency and accountability
- Kick-off workshop: March 2007
- Board consideration: November 2007



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