



## Carl Moyer Program Statistics 2020 Reporting Cycle

This document provides details on the Carl Moyer Program (Moyer Program or Moyer) expenditures as reported by local air. The data in this document, presented in a variety of tables below, reflects reported data through the 2020 reporting cycle.

### Introduction

The Moyer Program provides incentive grants to fund the incremental cost of cleaner-than-required engines, equipment and other technology. The core principle of the Moyer Program is to achieve cost-effective<sup>1</sup> emission reductions that are permanent, surplus, quantifiable, enforceable, and creditable to the State Implementation Plan (SIP). Covered pollutants include oxides of nitrogen (NO<sub>x</sub>), reactive organic gases (ROG), and particulate matter (PM).

The Moyer Program is implemented in partnership between the California Air Resources Board (CARB) and local air districts. Air districts administer Moyer Program grants and select the projects to fund while CARB works collaboratively with the air districts and other stakeholders to establish Guidelines<sup>2</sup> and provide oversight.

CARB allocates funds to the air districts according to statute and takes into account population, air quality and other factors. Air districts are allowed a minimum allocation of \$200,000 and air districts that accept a larger allocation must provide matching funds. While regular Moyer funds come from smog abatement and tire fees, the air districts use local funds, often motor vehicle registration fees under Assembly Bill (AB) 923 (Firebaugh, Chapter 707, Statutes of 2004), to meet their matching funds targets.

---

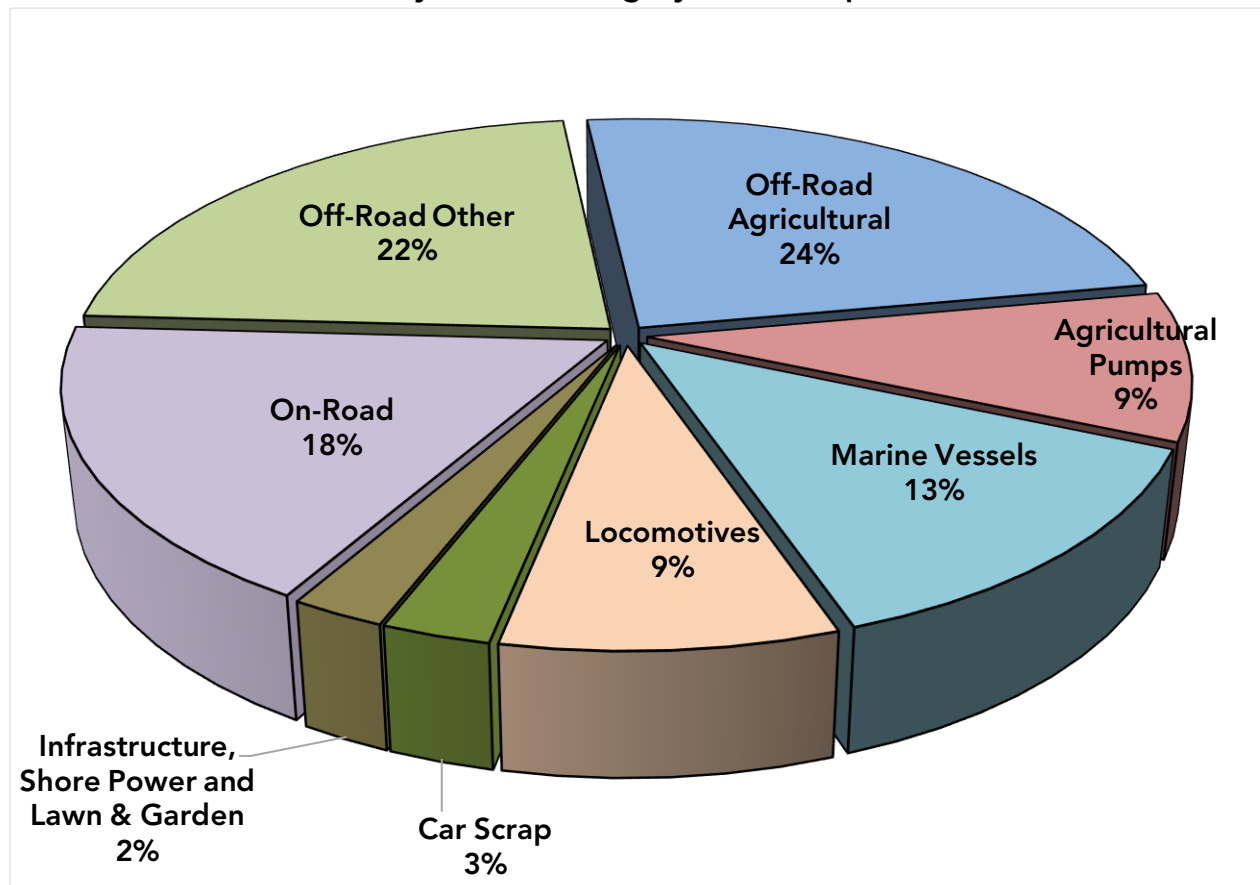
<sup>1</sup> Cost effectiveness limit may vary by project. Infrastructure projects enable the deployment of advanced technologies and are exempt from cost-effectiveness requirements and therefore do not have any reported emission reductions.

<sup>2</sup> Carl Moyer Guidelines: <http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>

## Background

The Moyer program funds a variety of project types in various source categories. The pie chart below shows the percent of funds spent in the different source categories since the inception of the program.

**Chart 1: Percent of Funds by Source Category since Inception in 1998**



Air districts report project information to CARB annually by August 29 of each year. Details about the vehicles, equipment, engine and other emission reduction technologies are reported in the districts in the Clean Air Reporting Log (CARL) database and the air district certify that the data are accurate and complete.

Funding Timeline: The Moyer Program began in 1998 and funds were first allocated in FY 1998-99, called "Moyer funding year 1." The most current Moyer funding year being included is Moyer funding year 22 (FY 2019-20), which is in the early stages of expenditure. Air districts have 4 years to liquidate each year of funds received. See the table below for examples:

Fiscal Year Allocation	Moyer Funding Year	Liquidation Year
2016-17	19	2021
2017-18	20	2022
2018-19	21	2023
2019-20	22	2024

Emission Reductions: Emission reductions are reported in tons and are derived by multiplying the annual emission reductions by the life of each project. The project life is the number of years the project achieves surplus emission reductions; it is also the contract period. Emission reductions are provided in total tons for the project.

Source Categories: The data in the tables and charts provide program information by general source category and detailed source category. For example, the general source category data group is "Off-Road - Other" that includes off-road construction, off-road cargo handling, off-road ground support equipment, and forklifts. The category agricultural pumps include both stationary and portable agricultural irrigation engines. The detailed source category table disaggregates this information by these specific equipment types. Data are also displayed by Moyer funding year, air district and priority populations, such as projects in disadvantaged communities.

Funds Executed vs. Total Allocated Funds: In Table 1 below, the Total Funds Allocation represents project and administration funds granted to air districts; administration funds are used by air districts to support program implementation and outreach and are not spent on projects. Funds Executed represent the reported funds spent or dedicated to projects via contract or a voucher. Funding sources include regular Moyer funds, Match, Non-Match, Multi-District, Rural Assistance Program, State Reserve, Moyer Interest and Salvage (salvage proceeds are from selling scrapped equipment for salvage). Note that funds reported as executed have not necessarily been liquidated yet. Also, air districts may report Non-Match AB 923 funded projects to CARB for SIP credit; however, there is no Non-Match allocation or target for air districts to meet. For that reason, funds executed may be greater than the allocation. Last, the summation of funds may slightly vary due to rounding.

Data Sources: Moyer Program data are compiled from 2 primary sources:

- Data for Moyer funding years 1-7 in Table 3 is gathered from the Carl Moyer 2006 Status Report<sup>3</sup>.
  - The 2006 Status Report provided results for Moyer funding years 1-6. Incomplete data for Moyer funding year 7 is extrapolated based on an average of the Moyer funding years 1-6 data, for the purpose of estimating a complete total.
  - Project life for years 1-7 is an average 9.7 years per table IV-2 on page 2 of the 2006 Status Report, for the purpose of calculations.
- Data for Moyer funding years 8-22 is generated from the CARL database. For the 2020 reporting cycle reflected in the report:
  - Moyer funding years 8-18 are fully liquidated; all funds are paid-in-full and the projects they funded are operational.
  - Moyer funding years 19-22 are at various stages of implementation, from contracted to liquidated.
  - Project life is based on reported information for each piece of equipment. Emission reductions are calculated over the full project life.
  - Funds executed will vary as projects are edited, added and dropped. Four funding years are in flux within every reporting cycle, so data are subject to change.

## Changes from Last Update

Staff made various improvements in the 2020 Moyer Statistics including:

- Since the 2019 Moyer Statistics, Moyer funding year 22 has been added and Moyer funding year 18 has been liquidated.
- Slight changes to the liquidated funding year data apparent in Table 5 may have occurred for the following reasons:
  - Withhold amounts were added to the Query Tool output, to align with the Liquidated report.
  - The Statistics now counts the number of infrastructure projects funded, whereas historically only the funding amount was included.
  - There may be slight corrections or changes to the liquidated data.
- Trend chart (Chart 2) is improved to show funds spent in specific source categories over time.
- Several new tables show how Moyer funds benefit priority populations including:

---

<sup>3</sup> Carl Moyer 2006 Status Report: <https://ww3.arb.ca.gov/msprog/moyer/status/status.htm>

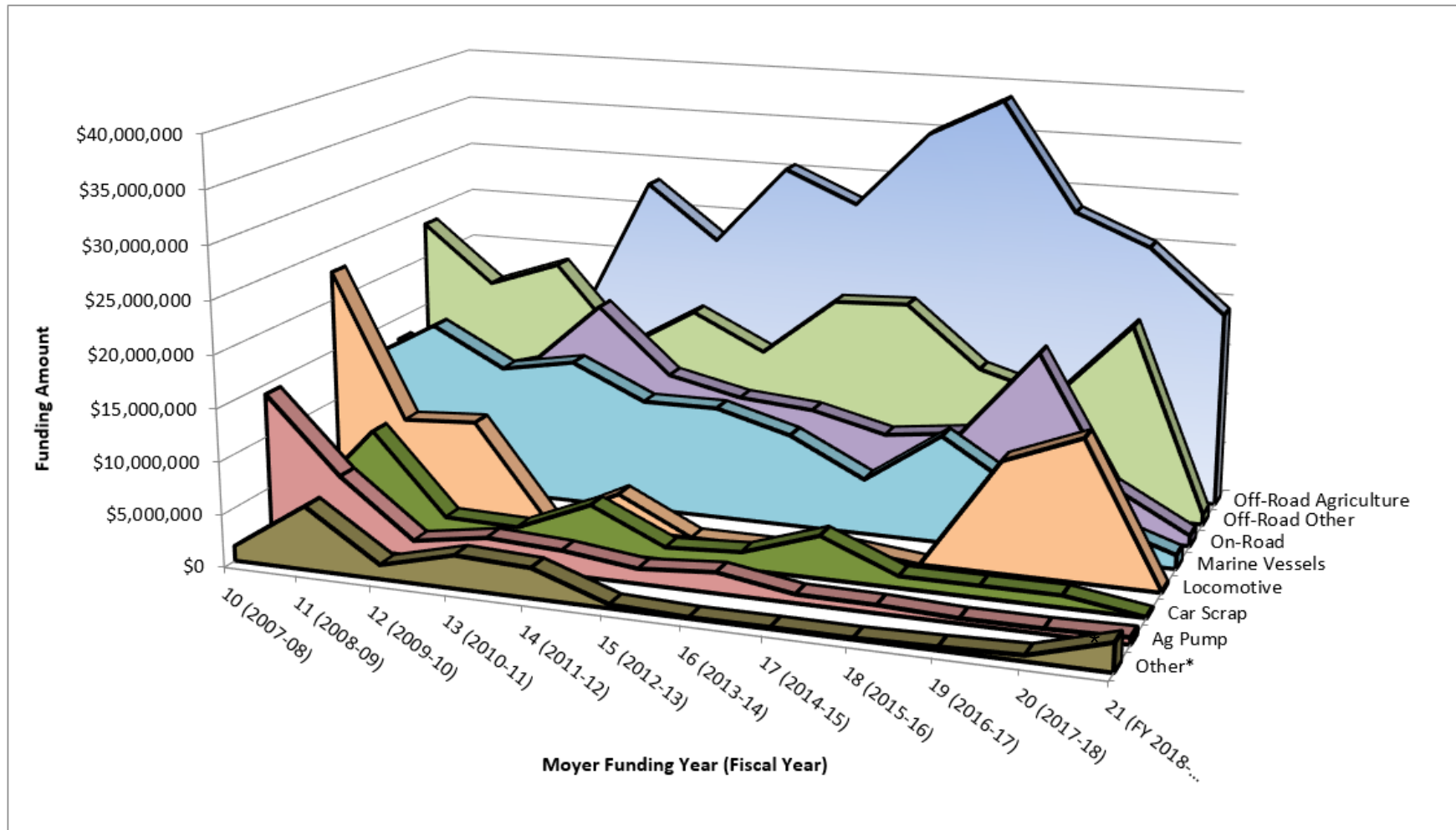
- Environmental Justice (EJ) Areas: AB 1390 (Firebaugh, Chapter 763, Statutes of 2001) required air districts with a population of over 1 million or more inhabitants to expend at least 50 percent of Moyer funds in low-income and/or minority populated areas (Health & Safety Code § 43023.5).
- Disadvantaged Communities (DAC): Senate Bill (SB) 535 (De León, Chapter 535, Statutes of 2012) directed California Environmental Protection Agency to identify DAC based on geographic, socioeconomic, public health, and environmental hazard criteria. The top 25 percent most impacted census tracts in California are designated a DAC.
- Low Income Communities (LIC): LICs are defined as the census tract that is either at or below 80 percent of the statewide median income.
- Community Air Protection (CAP): In response to AB 617 (C. Garcia, Chapter 136, Statutes of 2017) CARB established the CAP program that select communities to participate in a community focused monitoring and emission reduction program.

In the case of EJ areas, air districts self-define their EJ areas and report in CARL if the project benefits EJ areas. In the case of DAC, LIC, and CAP communities, CARB staff plotted the applicant and owner addresses to priority population boundaries using geographic information system software. Note that not all applicant and/or owner addresses were geolocated. Further, the funded vehicle/equipment may not necessarily operate at the applicant and/or owner reported address.

## Program Trends

The Moyer Program was established more than 22 years ago and the types of projects funded have evolved to meet local and State air quality objectives. The distribution of funds across project types is also affected by the economy, technology availability, and regulations. The chart below illustrates the amount of funds spent in the different source categories over an twelve year period covering Moyer funding year 10 (FY 2007-08) through Moyer funding year 21 (FY 2018-19).

**Chart 2: Trends by Source Category since Fiscal Year 2007-08**



\*The source category "Other" includes infrastructure, shore power and lawn & garden.

## Results and Tables

**Table 1: Moyer Program Summary for Moyer Funding Years 1-22<sup>1</sup>**

	Count <sup>4</sup>	Life NOx+ROG (tons) <sup>3</sup>	Life PM (tons) <sup>3</sup>	Funds Executed <sup>5</sup>	Total Funds Allocation <sup>2</sup>
Totals	68,696	198,417	7,343	\$1,216,356,334	\$1,497,899,660

1. Table includes reported project information for Moyer funding years 1-22. Moyer funding years 8-22 reflect total funded engines for all source categories in CARL with an executed contract. Category "Off-Road Other" includes construction, cargo handling, ground support, transportation refrigeration units and forklifts equipment. Moyer funding years 1-6 data are from the 2006 Status Report Table IV-1. Moyer funding year 7 data were extrapolated based on an average of Moyer funding years 1-6 data and factored to account for incomplete data - see 2006 Status Report page 9 text.

2. Total Funds Allocated includes project and district administration funds for Moyer funding years 1-22 including regular Moyer, Match, Multi-district and State Reserve, Rural Assistance Program, Moyer interest and Salvage. Not all these funds have been fully liquidated. Non-match funds do not have an allocation target.

3. Emission reductions are the total for the life of the project. For Moyer funding years 8-22 "life reductions" are derived by multiplying the annual emission reductions by the project life for each project. Project life for funding years 1-7 is 9.7 years, an average of the project lives published in the 2006 Status Report table IV-2 page 12.

4. Count includes the number of engines or projects including repower, retrofit, car scrap, new purchase, and vehicle/equipment replacements. Infrastructure and shore power counts the number of projects funded.

5. Funds Executed includes funding and payments reported on projects including regular Moyer, Match, Non-match, Multi-district, State Reserve, Rural Assistance Program, Moyer Interest and Salvage.

**Table 2: Moyer Funding Years 1-22 by General Source Category - Since Inception in 1998**

General Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
On-Road	7,894	25,493	680	\$213,087,465
Off-Road Other	3,273	41,307	1,441	\$272,454,503
Off-Road Agriculture	4,472	24,619	1,071	\$290,266,921
Agricultural Pumps	7,838	61,685	2,378	\$113,885,117
Marine Vessels	2,189	31,826	1,462	\$160,978,023
Locomotives	232	9,579	277	\$103,081,763
Car Scrap	31,223	3,275	17	\$33,479,337
Lawn and Garden	11,485	69	3	\$1,665,252
Shore Power	7	564	14	\$11,112,779
Infrastructure	84	N/A	N/A	\$16,345,173
Total	68,696	198,417	7,343	\$1,216,356,334

**Table 3: Moyer Funding Years 1-7 by General Source Category - from 2006 Status Report**

General Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
On-Road	2,782	15,426	418	\$46,990,021
Off-Road Other	662	13,649	654	\$25,165,414
Off-Road Agriculture	157	628	26	\$1,778,700
Agricultural Pumps	4,326	39,834	1,778	\$49,852,783
Marine Vessels	606	16,629	954	\$34,926,693
Locomotives	35	1,268	26	\$3,184,149
Car Scrap*	0	0	0	0
Lawn and Garden*	0	0	0	0
Shore Power*	0	0	0	0
Infrastructure*	N/A	N/A	N/A	0
<b>Total</b>	<b>8,567</b>	<b>87,434</b>	<b>3,857</b>	<b>\$161,897,759</b>

\* These source categories were not available in the early years of the Moyer Program.

**Table 4: Moyer Funding Years 8-22 by General Source Category - from CARL**

General Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
On-Road	5,178	10,095	264	\$166,330,625
Off-Road Other	2,545	27,629	786	\$247,055,909
Off-Road Agriculture	4,315	23,992	1,045	\$288,488,222
Agricultural Pumps	3,512	21,851	600	\$64,032,335
Marine Vessels	1,583	15,196	508	\$126,051,330
Locomotive	197	8,311	251	\$99,897,614
Car Scrap	31,223	3,275	17	\$33,479,337
Lawn and Garden Equipment	11,488	69	3	\$1,665,624
Shore Power	7	564	14	\$11,112,779
Infrastructure	84	N/A	N/A	\$16,345,173
<b>Total</b>	<b>60,129</b>	<b>110,982</b>	<b>3,486</b>	<b>\$1,054,458,575</b>



**Table 5: Program Statistics by Moyer Funding Years 8-22**

Moyer Funding Year (fiscal year) <sup>1</sup>	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Project Allocation Funds <sup>2</sup>	Total Allocation (including admin) <sup>3</sup>
8 (2005-06)	4,216	28,285	867	\$100,075,642	\$94,977,599	\$98,341,039
9 (2006-07)	5,633	14,525	468	\$96,644,423	\$91,599,870	\$98,042,759
10 (2007-08)	3,383	10,983	257	\$93,908,226	\$91,695,316	\$98,215,368
11 (2008-09)	9,551	10,043	265	\$84,423,049	\$80,461,822	\$86,410,101
12 (2009-10)	2,607	5,716	141	\$72,136,182	\$70,381,770	\$75,441,596
13 (2010-11)	5,585	6,790	216	\$79,593,467	\$72,234,034	\$77,245,242
14 (2011-12)	11,757	5,428	168	\$74,774,604	\$72,129,676	\$77,230,537
15 (2012-13)	3,844	4,893	175	\$67,513,364	\$64,812,283	\$69,491,666
16 (2013-14)	2,655	4,886	169	\$68,424,249	\$66,774,215	\$71,494,364
17 (2014-15)	4,765	4,859	142	\$73,032,307	\$69,789,975	\$74,742,081
18 (2015-16)	1,937	4,512	179	\$72,998,100	\$69,737,576	\$75,017,119
19 (2016-17)*	2,146	4,870	181	\$75,127,409	\$69,824,337	\$75,058,955
20 (2017-18)*	1,681	3,541	172	\$68,442,051	\$81,896,711	\$87,730,960
21 (2018-19)*	345	1,581	83	\$25,900,131	\$84,822,427	\$90,644,683
22 (2019-20)*	24	69	3	\$1,465,369	\$101,101,357	\$108,018,836
<b>Total</b>	<b>60,129</b>	<b>110,982</b>	<b>3,486</b>	<b>\$1,054,458,575</b>	<b>\$1,182,238,968</b>	<b>\$1,263,125,303</b>

1. Moyer funding years with an asterisk indicates the funding years that are in progress and are subject to change. Liquidated years 8-18 represent fully paid and operational projects, however, edits to the data and/or to the CARL database may cause slight variations in these data from year to year.

2. Project Allocation Funds are the annual project allocation including regular Moyer, Match, Multi-district, State Reserve, Rural Assistance Program, and reported Moyer interest, but does not include administration funds.

3. Total Allocation Funds include the project and administration funds for regular Moyer, Match, Multi-district, State Reserve, Rural Assistance Program, reported Moyer interest and Salvage.

**Table 6: Program Statistics by Source Category and Project Type for Moyer Funding Years 8-22**

Source Category	Vehicle/Equipment Type	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
On-Road	Auxiliary Power Unit	1	10	5	\$39,033
	Emergency Vehicle	46	236	15	\$7,660,375
	Heavy Heavy-Duty Vehicle	2,847	5,205	151	\$91,633,024
	Light Heavy-Duty Vehicle	192	209	5	\$5,247,657
	Line Haul	238	398	26	\$6,822,391
	Medium Heavy-Duty Vehicle	134	185	3	\$3,281,220
	School Bus	105	152	2	\$11,905,609
	Solid Waste / Refuse Collection Vehicle	463	1,196	1	\$11,021,004
	Stop-and-Go Street Sweeper	86	185	5	\$2,462,665
	Transit Vehicle	551	1,290	32	\$10,400,573
	Urban Transit Bus	239	422	3	\$4,966,393
	TIMBER	210	578	15	\$10,657,500
	Transport Refrigeration Units	66	29	2	\$233,180
Off-Road - Agriculture	Balers	5	19	1	\$446,450
	Chippers/Stump Grinders	3	90	2	\$1,490,120
	Combines / Choppers	96	915	26	\$13,569,034
	Forklifts	2	2	0	\$58,300
	Generator Sets	1	6	0	\$55,792
	Hydro Power Units	2	6	0	\$124,000
	Mowers	2	2	0	\$121,974
	Other	864	6,430	280	\$79,642,303
	Sprayers	6	29	1	\$397,333
	Swathers	15	74	3	\$1,420,940
	Tractors	3,319	16,420	731	\$191,161,976

Source Category	Vehicle/Equipment Type	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
Agricultural Pump	Other	11	11	1	\$158,397
	Portable Agricultural Irrigation Pump	272	768	25	\$5,202,428
	Stationary Agricultural Irrigation Pump	3,229	21,072	574	\$58,671,510
Off-Road - Construction	Bore/Drill Rigs	13	34	1	\$416,443
	Cranes	44	255	7	\$2,333,771
	Crawler Tractors	128	1,473	35	\$20,622,015
	Crushing/Processing	7	41	1	\$426,833
	Excavators	93	452	11	\$7,906,398
	Graders	81	442	12	\$6,600,095
	Loaders/Backhoes	157	530	22	\$10,816,685
	Other	86	957	39	\$6,874,502
	Pavers	2	4	0	\$29,361
	Paving Equipment	1	1	0	\$20,261
	Rollers	8	8	1	\$382,311
	Rough Terrain Forklifts	119	146	7	\$3,338,202
	Rubber-Tired Dozers	59	548	10	\$7,065,153
	Rubber-Tired Loaders	258	1,600	41	\$29,812,103
	Scrapers	1,026	18,116	497	\$122,503,674
	Skid Steer Loaders	34	19	2	\$686,886
	Surfacing Equipment	5	21	-	\$268,053
	Tractors	3	0	0	\$45,274
	Trenchers	3	3	0	\$103,575
	Trucks	55	1,455	50	\$9,895,366
	Welders	1	1	0	\$8,313

Source Category	Vehicle/Equipment Type	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
Off-Road - Airport Ground	A/C Tugs Wide Body	11	37	2	\$771,108
	Belt Loader	19	18	1	\$633,216
	Cargo Tractor	67	62	3	\$1,875,504
Off-Road - Cargo Handling	Cargo Excavator	1	2	0	\$125,187
	Cargo Forklift	1	-	0	\$13,249
	Cargo Sweeper/Scrubber	2	1	0	\$30,536
	Cargo Yard Truck	15	83	3	\$1,571,232
	Other	8	40	1	\$381,392
Off-Road - Other	Aerial Lifts	15	16	1	\$570,672
	Forklifts	73	310	11	\$1,527,399
	Industrial	34	10	1	\$573,844
	Other	70	826	21	\$5,527,746
	Other General Industrial	6	19	1	\$610,907
	Other Material Handling	25	81	3	\$2,264,819
	Skidders	1	3	0	\$80,144
	Workover Rigs (Mobile)	1	6	0	\$285,423
Off-Road - Forklifts	Forklift Engines	13	10	-	\$58,259
Locomotives	Alternative Switcher	1	40	1	\$760,000
	Alternative Technology Switcher - Multiple Engine - Off-Road Engine	1	91	3	\$1,269,600
	Line Haul	7	665	40	\$12,533,500
	Passenger	90	2,675	64	\$28,079,551
	Switcher	98	4,840	143	\$57,254,964

Source Category	Vehicle/Equipment Type	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
Marine Vessels	Auxiliary Engine	28	123	4	\$579,827
	Barge/Dredge	2	1	0	\$36,000
	Charter Fishing Boat	520	2,759	104	\$38,818,262
	Commercial Fishing Boat	550	2,754	99	\$41,792,527
	Crew and Supply Ship	60	653	22	\$4,213,831
	Ferry/Excursion	133	3,635	110	\$13,591,247
	Other	44	298	10	\$2,845,337
	Pilot Boat	4	117	3	\$431,742
	Shore-Power Ship Side	7	564	14	\$11,112,779
	Tow Boat	17	268	7	\$2,408,532
	Tug Boat	123	3,930	125	\$12,446,763
	Work Boat	102	659	23	\$8,887,262
Infrastructure	Alternative Fueling Station	68	-	-	\$12,665,943
	Battery Charging Station	6	-	-	\$2,652,326
	Line Extension	9	-	-	\$1,017,403
	Stationary Agricultural Pump Electrification	1	-	-	\$9,500
Car Scrap	Voluntary Accelerated Vehicle Retirement	31,223	3,275	17	\$33,479,337
Lawn and Garden	Lawn and Garden	11,485	69	3	\$1,665,552
Total		60,129	110,982	3,486	\$1,054,458,575

**Table 7: Zero Emission Technology Projects for Moyer Funding Years 8-22**

Source Category	Vehicle/Equipment Type	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
On-Road	School Bus	4	3	0.1	\$601,443
Off-Road Agriculture	Forklifts	2	2	0.1	\$58,300
Off-Road Other	A/C Tugs Wide Body	9	13	0.4	\$271,638
Off-Road Other	Cargo Yard Truck	4	23	0.7	\$694,500
Off-Road Other	Belt Loader	19	18	1.0	\$633,216
Off-Road Other	Cargo Tractor	62	57	3.0	\$1,724,206
Off-Road Other	Forklifts	28	252	8.8	\$367,269
Lawn and Garden	Lawn and Garden	11,485	69	2.8	\$1,665,252
Marine Vessels	Shore-Power Ship Side	5	324	7.2	\$5,979,687
Agricultural Pumps	Stationary Agricultural Pump	2,049	17,510	459.0	\$38,552,083
Agricultural Pumps	Portable Agricultural Pump	11	34	1.6	\$280,029
Infrastructure	Battery Charging Station	6	-	-	\$2,652,326
Total		13,684	18,305	485	\$53,480,950

**Table 8: On-Road Alternative Fuel Projects by Air District for Moyer Funding Years 8-22**

Air District	Vehicle Type	Fuel Type <sup>1</sup>	Count	Life NOx+RO G (tons)	Life PM (tons)	Funds Executed
Bay Area AQMD	School Bus	CNG	1	1	0.0	\$209,782
Bay Area AQMD	School Bus	ELEC	3	2	0.0	\$476,069
Bay Area AQMD	Solid Waste/Refuse Collection Vehicle	CNG	29	62	0.0	\$716,300
Sacramento Metropolitan AQMD	School Bus	ELEC	1	1	0.0	\$125,374
San Joaquin Valley APCD	School Bus	CNG	5	8	0.1	\$572,915
San Luis Obispo County APCD	School Bus	LPG	1	1	0.0	\$127,330
Santa Barbara County APCD	School Bus	CNG	5	3	0.0	\$452,065
South Coast AQMD	Heavy Heavy-Duty Vehicle	DUAL	1	0	0.0	\$11,377
South Coast AQMD	Line Haul	CNG	5	3	0.2	\$90,000
South Coast AQMD	Medium Heavy-Duty Vehicle	CNG	10	14	0.8	\$388,665
South Coast AQMD	Solid Waste/Refuse Collection Vehicle	CNG	23	76	0.0	\$1,085,133
South Coast AQMD	Stop-and-Go Street Sweeper	CNG	14	51	1.2	\$559,902
South Coast AQMD	Stop-and-Go Street Sweeper	LNG	70	130	3.6	\$1,870,856
South Coast AQMD	Transit Vehicle	CNG	304	962	22.8	\$5,227,584
South Coast AQMD	Transit Vehicle	LNG	187	243	5.8	\$4,675,000
South Coast AQMD	Urban Transit Bus	CNG	207	354	2.6	\$4,258,894
Tuolumne County APCD	School Bus	LPG	2	5	0.1	\$118,384
Ventura County APCD	Solid Waste/Refuse Collection Vehicle	LNG	5	3	0.0	\$40,630
Total			873	1,920	37	\$21,006,259

1. Key to fuel types: compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), electric /fuel cell (ELEC), and dual fuel (DUAL).

**Table 9: Funding in EJ Communities Cumulatively for Moyer Funding Years 8-22**

Air District	Funds Executed	Funding in EJ	Percent in EJ
Bay Area AQMD	\$144,699,510	\$72,391,124	50%
Sacramento Metropolitan AQMD	\$84,187,109	\$55,516,373	66%
San Diego County APCD	\$69,395,296	\$42,762,004	62%
San Joaquin Valley APCD	\$171,813,708	\$118,268,873	69%
South Coast AQMD	\$423,995,517	\$227,484,731	54%
Total	\$894,091,140	\$516,423,106	58%

**Table 10: Funding in DAC and LIC Moyer Funding Years 8-22**

Air District	Funds Executed	Funding in DAC <sup>1</sup>	Percent in DAC <sup>1</sup>	Funding in LIC and DAC <sup>1, 2</sup>	Percent in LIC and DAC <sup>1, 2</sup>
Amador County APCD	\$247,059	\$0	0%	\$0	0%
Antelope Valley AQMD	\$8,949,909	\$55,285	1%	\$7,596,386	85%
Bay Area AQMD	\$144,699,510	\$22,971,689	16%	\$45,680,796	32%
Butte County AQMD	\$6,685,552	\$769,418	12%	\$3,912,161	59%
Calaveras County APCD	\$1,125,914	\$0	0%	\$584,595	52%
Colusa County APCD	\$4,574,594	\$34,896	1%	\$446,072	10%
Eastern Kern APCD	\$2,371,388	\$840,596	35%	\$1,585,175	67%
El Dorado County AQMD	\$1,074,251	\$0	0%	\$209,440	19%
Feather River AQMD	\$7,349,166	\$67,600	1%	\$3,194,256	43%
Glenn County APCD	\$4,110,856	\$0	0%	\$1,427,248	35%
Imperial County APCD	\$5,598,149	\$2,242,262	40%	\$2,677,943	48%
Lake County AQMD	\$819,259	\$0	0%	\$445,616	54%
Lassen County APCD	\$2,643,255	\$0	0%	\$1,051,997	40%
Mendocino County AQMD	\$3,121,238	\$0	0%	\$2,184,423	70%
Modoc County APCD	\$500,656	\$0	0%	\$466,056	93%
Mojave Desert AQMD	\$7,343,936	\$1,345,040	18%	\$3,433,566	47%
Monterey Bay Unified APCD	\$13,479,638	\$1,199,701	9%	\$4,873,372	36%
North Coast Unified AQMD	\$10,194,332	\$60,000	1%	\$7,138,272	70%
Northern Sierra AQMD	\$2,744,887	\$0	0%	\$1,512,505	55%



Air District	Funds Executed	Funding in DAC <sup>1</sup>	Percent in DAC <sup>1</sup>	Funding in LIC and DAC <sup>1, 2</sup>	Percent in LIC and DAC <sup>1, 2</sup>
Northern Sonoma County APCD	\$3,664,054	\$150,000	4%	\$604,600	17%
Placer County APCD	\$1,693,304	\$0	0%	\$548,545	32%
Sacramento Metropolitan AQMD	\$84,187,109	\$6,323,847	8%	\$35,036,782	42%
San Diego County APCD	\$69,395,296	\$10,416,840	15%	\$36,420,073	52%
San Joaquin Valley APCD	\$171,813,708	\$115,015,713	67%	\$128,375,637	75%
San Luis Obispo County APCD	\$6,234,784	\$14,000	0%	\$1,158,519	19%
Santa Barbara County APCD	\$9,081,604	\$385,074	4%	\$3,713,946	41%
Shasta County AQMD	\$9,296,923	\$135,000	1%	\$7,878,406	85%
Siskiyou County APCD	\$3,895,551	\$0	0%	\$3,419,489	88%
South Coast AQMD	\$423,995,517	\$201,843,107	48%	\$260,967,333	62%
Tehama County APCD	\$4,147,515	\$103,450	2%	\$3,366,346	81%
Tuolumne County APCD	\$2,383,519	\$0	0%	\$1,051,304	44%
Ventura County APCD	\$37,036,142	\$10,091,147	27%	\$19,123,570	52%
Total	\$1,054,487,575	\$374,064,664	35%	\$590,084,429	56%

1.For Disadvantaged Communities see SB 535 (De León, Chapter 535, Statutes of 2012)

2. For Low-Income and Disadvantaged Communities see AB 1550 (Gomez, Chapter 369, Statutes of 2016)

**Table 11: Moyer Projects in AB 617 Communities by Source Category - Funding Year 16-22**

AB 617 Community	Source Category	Count	Life NOx+ROG (tons)	Total PM (tons)	Funds Executed
<b>Bay Area AQMD</b>					
Richmond - San Pablo	Car Scrap	260	31.61	0.15	\$289,871
	Locomotive	3	60.46	0.77	\$1,023,945
	Marine Vessels	10	123.31	0.44	\$825,646
	Off-Road Other	4	12.20	0.54	\$371,928
	On-Road	8	15.72	1.14	\$342,570
West Oakland	Car Scrap	41	4.40	0.02	\$46,379
	Marine Vessels	15	214.53	6.06	\$3,036,914
	On-Road	1	0.58	0.00	\$15,000
<b>Imperial County APCD</b>					
El Centro, Heber, Calexico	Infrastructure	1	0.00	0.00	\$229,559
	Off-Road	10	23.58	1.31	\$415,627
	On-Road	37	82.78	0.84	\$1,270,000
	Agricultural Pump	6	11.97	0.37	\$123,184
<b>Sacramento Metropolitan AQMD</b>					
South Sacramento - Florin	Car Scrap	2,092	191.15	0.83	\$2,194,508
	Marine Vessels	4	18.05	0.72	\$333,800
	On-Road	5	13.63	0.18	\$160,000

AB 617 Community	Source Category	Count	Life NOx+ROG (tons)	Total PM (tons)	Funds Executed
<b>San Diego County APCD</b>					
Portside Environmental Justice	Locomotive	2	113.70	2.67	\$1,739,173
	Marine Vessels	31	493.24	15.70	\$3,633,839
	Off-Road Other	6	15.52	0.51	\$400,278
	On-Road	5	3.54	0.24	\$109,769
	Shore Power	1	7.39	0.35	\$204,317
<b>San Joaquin Valley APCD</b>					
Shafter	Off-Road	1	9.81	0.25	\$76,500
	On-Road	2	3.97	0.00	\$65,000
	Agricultural Pump	1	1.37	0.04	\$15,000
South Central Fresno	Off-Road	7	64.57	2.54	\$239,092
	Off-Road Other	1	12.87	0.57	\$199,783
	On-Road	4	7.28	0.40	\$95,000
	Agricultural Pump	1	13.41	0.12	\$32,208
Stockton	Car Scrap	2	0.20	0.00	\$2,098
	Locomotive	2	298.36	6.40	\$3,186,047
	Off-Road Other	2	38.79	1.57	\$279,350
	On-Road	1	2.20	0.00	\$35,000

AB 617 Community	Source Category	Count	Life NOx+ROG (tons)	Total PM (tons)	Funds Executed
<b>South Coast AQMD</b>					
Eastern Coachella Valley	Off-Road	92	495.84	27.56	\$7,629,366
	Off-Road Other	5	8.17	0.45	\$172,158
	On-Road	5	9.72	0.01	\$175,000
	Agricultural Pump	2	6.55	0.21	\$119,256
East Los Angeles, Boyle Heights, West	Infrastructure	1	0.00	0.00	\$247,500
	Off-Road	1	6.37	0.46	\$62,156
	Off-Road Other	8	50.77	1.53	\$654,042
	On-Road	24	45.05	1.10	\$951,444
San Bernardino, Muscoy	Locomotive	6	425.08	26.21	\$11,533,500
	Off-Road Other	1	8.91	0.31	\$122,930
	On-Road	29	47.38	0.94	\$758,437
South East Los Angeles	Marine Vessels	2	8.68	0.33	\$214,200
	Off-Road	1	4.14	0.23	\$52,202
	On-Road	30	63.37	1.09	\$1,158,862
Wilmington, Carson, West Long Beach	Locomotive	29	1,496.98	44.48	\$19,990,629
	Marine Vessels	185	1,370.77	48.89	\$17,904,058
	Off-Road Other	25	95.62	1.72	\$1,268,849
	On-Road	25	41.26	0.71	\$900,762
	Infrastructure	1	0.00	0.00	\$1,054,350
Total		3,038	6,075	201	\$85,961,085

**Table 12: Program Statistics by Air District and Source Category for Moyer Funding Years 8-22**

Air District	Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Average Cost-Effectiveness
Amador County APCD	On-Road	1	2	0.1	\$45,000	\$15,309
	Off-Road Agriculture	2	20	0.7	\$106,260	\$6,473
	Off-Road Other	3	16	0.3	\$95,798	\$8,808
Antelope Valley AQMD	On-Road	2	1	0.0	\$37,657	\$29,920
	Off-Road Agriculture	35	182	7.2	\$3,633,297	\$14,026
	Off-Road Other	38	145	7.1	\$3,738,334	\$16,603
	Agricultural Pump	5	49	1.5	\$302,816	\$6,570
	Car Scrap	741	73	0.4	\$741,000	\$10,612
	Infrastructure	9	N/A	N/A	\$496,806	N/A
Bay Area AQMD	On-Road	408	695	13.6	\$12,781,805	\$15,441
	Off-Road Agriculture	619	949	50.7	\$31,493,379	\$17,782
	Off-Road Other	345	2,211	84.5	\$25,323,488	\$14,025
	Locomotive	27	920	26.2	\$10,547,454	\$7,559
	Marine Vessels	358	7,976	245.2	\$30,860,444	\$11,020
	Agricultural Pump	6	18	0.6	\$64,438	\$2,894
	Car Scrap	27,266	2,827	14.6	\$29,212,490	\$11,020
	Infrastructure	2	N/A	N/A	\$2,353,113	N/A
	Shore Power	3	102	2.7	\$2,062,899	\$15,969
Butte County AQMD	On-Road	25	42	1.1	\$1,769,718	\$110,163
	Off-Road Agriculture	94	339	21.3	\$2,734,332	\$6,857
	Off-Road Other	12	42	1.1	\$555,659	\$9,941
	Agricultural Pump	93	244	8.9	\$1,625,843	\$6,220
Calaveras County APCD	On-Road	10	28	1.8	\$934,480	\$61,791
	Off-Road Other	2	45	1.6	\$189,839	\$3,122
	Lawn and Garden	11	0	0.0	\$1,595	\$13,941
Colusa County APCD	Off-Road Agriculture	21	111	24.0	\$822,839	\$5,608
	Agricultural Pump	179	1,590	57.4	\$3,751,755	\$2,830

	On-Road	8	12	0.6	\$894,490	\$65,703
Air District	Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Eastern Kern APCD	Off-Road Other	12	59	1.9	\$905,636	\$11,521
	Agricultural Pump	23	49	1.0	\$571,263	\$10,758
El Dorado County AQMD	On-Road	6	6	0.0	\$723,651	\$120,278
	Off-Road Other	1	6	0.2	\$285,423	\$30,006
	Lawn and Garden	450	3	0.1	\$65,177	\$25,877
Feather River AQMD	On-Road	8	4	0.0	\$983,098	\$263,833
	Off-Road Agriculture	131	470	23.8	\$5,107,577	\$9,629
	Off-Road Other	3	4	0.2	\$116,609	\$14,437
	Agricultural Pump	94	220	9.0	\$1,141,882	\$6,133
Glenn County APCD	On-Road	6	0	0.5	\$77,556	\$8,433
	Off-Road Agriculture	56	180	8.9	\$1,927,278	\$6,472
	Off-Road Other	2	9	0.3	\$144,665	\$11,540
	Agricultural Pump	165	536	19.5	\$1,961,357	\$3,957
Imperial County APCD	Off-Road Agriculture	86	231	11.1	\$3,497,838	\$9,339
	Off-Road Other	1	3	0.2	\$90,000	\$15,462
	Agricultural Pump	92	151	4.9	\$1,780,752	\$9,398
	Infrastructure	1	N/A	N/A	\$229,559	N/A
Lake County AQMD	On-Road	6	10	1.1	\$689,846	\$66,023
	Off-Road Other	2	4	0.1	\$91,976	\$13,888
	Agricultural Pump	3	3	0.1	\$37,437	\$7,937
Lassen County APCD	On-Road	2	4	0.1	\$75,000	\$15,072
	Off-Road Agriculture	48	109	5.1	\$1,771,276	\$12,176
	Off-Road Other	5	16	0.4	\$303,483	\$13,377
	Agricultural Pump	25	152	5.7	\$493,496	\$4,760
Mendocino County AQMD	On-Road	21	11	1.2	\$354,980	\$11,817
	Off-Road Agriculture	8	38	1.3	\$516,995	\$10,435
	Off-Road Other	9	47	9.5	\$653,483	\$9,749
	Marine Vessels	16	154	5.3	\$881,558	\$7,728
	Agricultural Pump	23	57	2.2	\$714,222	\$13,635

Air District	Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Modoc County APCD	Off-Road Agriculture	6	17	0.7	\$236,110	\$9,038
	Off-Road Other	4	41	1.4	\$155,914	\$4,998
	Agricultural Pump	5	9	0.3	\$108,632	\$8,548
Mojave Desert AQMD	On-Road	3	12	5.1	\$98,441	\$10,845
	Off-Road Agriculture	15	78	4.0	\$1,493,651	\$11,900
	Off-Road Other	19	119	4.7	\$1,931,115	\$12,493
	Locomotive	2	242	14.9	\$1,323,712	\$6,748
	Car Scrap	1,001	101	0.5	\$1,186,383	\$12,349
	Infrastructure	7	N/A	N/A	\$1,310,633	N/A
Monterey Bay Unified APCD	Off-Road Agriculture	45	166	8.5	\$2,835,282	\$7,937
	Off-Road Other	25	170	7.3	\$4,289,789	\$14,563
	Marine Vessels	84	355	11.9	\$4,908,237	\$11,096
	Agricultural Pump	43	154	4.6	\$1,148,187	\$6,739
	Infrastructure	3	N/A	N/A	\$298,143	N/A
North Coast Unified AQMD	On-Road	91	243	8.5	\$4,114,637	\$12,575
	Off-Road Agriculture	62	164	13.4	\$2,927,527	\$10,703
	Off-Road Other	10	91	3.0	\$652,532	\$7,122
	Marine Vessels	38	399	13.4	\$2,499,636	\$5,174
Northern Sierra AQMD	On-Road	12	18	1.5	\$614,384	\$14,241
	Off-Road Agriculture	13	53	2.4	\$914,217	\$11,258
	Off-Road Other	16	58	2.1	\$1,194,659	\$13,815
	Infrastructure	2	N/A	N/A	\$21,626	N/A
Northern Sonoma County APCD	On-Road	5	14	0.4	\$265,000	\$13,560
	Off-Road Agriculture	67	86	6.1	\$2,484,812	\$14,956
	Off-Road Other	3	10	0.4	\$122,100	\$10,846
	Marine Vessels	3	12	0.4	\$194,100	\$10,684
	Agricultural Pump	21	24	0.7	\$448,042	\$12,969
	Infrastructure	1	N/A	N/A	\$150,000	N/A

Air District	Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Placer County APCD	On-Road	3	2	0.0	\$435,341	\$231,825
	Off-Road Agriculture	10	24	1.7	\$1,141,414	\$22,090
	Infrastructure	1	N/A	N/A	\$116,549	N/A
Sacramento Metropolitan AQMD	On-Road	177	251	17.2	\$4,372,070	\$10,032
	Off-Road Agriculture	596	2,593	91.9	\$49,300,355	\$12,522
	Off-Road Other	129	827	27.4	\$10,180,626	\$10,458
	Locomotive	40	1,193	35.2	\$10,703,763	\$5,143
	Marine Vessels	10	39	1.0	\$235,786	\$6,150
	Agricultural Pump	635	2,303	69.2	\$9,394,510	\$5,562
San Diego County APCD	On-Road	376	592	10.3	\$11,060,975	\$18,934
	Off-Road Agriculture	76	272	14.9	\$5,373,467	\$11,652
	Off-Road Other	220	1,365	49.0	\$22,491,633	\$13,509
	Locomotive	10	974	22.5	\$13,027,309	\$10,682
	Marine Vessels	188	1,198	40.9	\$13,876,817	\$11,154
	Agricultural Pump	20	111	3.5	\$543,990	\$7,817
	Infrastructure	1	N/A	N/A	\$500,000	N/A
	Shore Power	2	156	2.9	\$2,521,105	\$14,095
San Joaquin Valley APCD	On-Road	490	837	40.0	\$14,440,998	\$14,319
	Off-Road Agriculture	1,165	12,335	477.2	\$95,087,294	\$6,326
	Off-Road Other	89	1,251	43.8	\$10,654,982	\$8,477
	Locomotive	29	2,002	57.1	\$19,204,476	\$4,507
	Agricultural Pump	1,691	15,115	372.0	\$32,425,958	\$3,517



Air District	Source Category	Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
San Luis Obispo County APCD	On-Road	29	67	1.5	\$1,493,941	\$32,918
	Off-Road Agriculture	47	74	3.7	\$1,977,720	\$15,896
	Off-Road Other	19	73	2.4	\$1,265,062	\$12,509
	Marine Vessels	3	5	0.2	\$89,563	\$12,463
	Agricultural Pump	38	121	3.4	\$752,399	\$6,221
	Car Scrap	523	54	0.3	\$580,500	\$11,141
	Infrastructure	1	N/A	N/A	\$75,600	N/A
Santa Barbara County APCD	On-Road	19	11	0.3	\$710,458	\$65,374
	Off-Road Agriculture	49	165	7.4	\$3,545,872	\$13,558
	Off-Road Other	15	77	3.6	\$879,992	\$11,264
	Marine Vessels	42	78	2.7	\$1,592,484	\$13,765
	Agricultural Pump	25	120	3.6	\$563,271	\$5,858
	Car Scrap	1,692	220	0.9	\$1,758,964	\$10,520
	Infrastructure	2	N/A	N/A	\$30,564	N/A
Shasta County AQMD	On-Road	90	260	5.6	\$4,491,657	\$13,408
	Off-Road Agriculture	92	300	13.6	\$3,283,880	\$6,943
	Off-Road Other	24	88	4.0	\$1,292,363	\$9,287
	Agricultural Pump	13	43	1.6	\$229,023	\$4,861
Siskiyou County APCD	On-Road	36	64	2.0	\$2,827,135	\$85,678
	Off-Road Agriculture	4	39	1.4	\$293,022	\$5,034
	Off-Road Other	10	53	1.9	\$766,000	\$12,824
	Agricultural Pump	1	12	0.4	\$9,394	\$552
South Coast AQMD	On-Road	3,288	6,752	149.3	\$98,976,661	\$12,485
	Off-Road Agriculture	367	2,610	129.2	\$40,773,675	\$10,585
	Off-Road Other	1,498	20,257	508.3	\$156,498,630	\$11,265
	Locomotive	89	2,980	94.8	\$45,090,901	\$8,846
	Marine Vessels	731	4,416	165.7	\$63,485,895	\$11,659
	Agricultural Pump	6	67	1.0	\$279,922	\$5,696
	Infrastructure	54	N/A	N/A	\$10,762,579	N/A
	Lawn and Garden	11,024	67	2.6	\$1,598,480	\$14,850
	Shore Power	2	306	8.1	\$6,528,775	\$14,852
	On-Road	10	68	0.5	\$782,469	\$12,072

Air District	Source Category	Count	Life NO <sub>x</sub> +ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Tehama County APCD	Off-Road Agriculture	65	190	10.2	\$2,276,100	\$10,750
	Agricultural Pump	51	151	8.0	\$1,088,946	\$6,423
Tuolumne County APCD	On-Road	19	23	1.3	\$1,213,065	\$79,022
	Off-Road Agriculture	15	60	2.2	\$950,348	\$13,678
	Off-Road Other	5	23	1.0	\$220,107	\$11,303
Ventura County APCD	On-Road	27	68	0.5	\$1,066,113	\$21,784
	Off-Road Agriculture	521	2,135	102.6	\$21,982,406	\$6,203
	Off-Road Other	24	517	17.9	\$1,966,012	\$4,009
	Marine Vessels	110	565	21.1	\$7,426,810	\$9,295
	Agricultural Pump	255	552	20.5	\$4,594,801	\$6,521
Grand Total		60,129	110,982	3,486	\$1,054,458,575	N/A

\*For the early years of the Moyer program, Sacramento Metropolitan AQMD administered funds for El Dorado, Placer and Yolo-Solano while later both Placer and El Dorado began also administering their own programs. San Joaquin Valley figures include projects in the Great Basin District.