



Carl Moyer Program Statistics 2021 Reporting Cycle

This document provides details on the Carl Moyer Program (Moyer Program or Moyer) expenditures as reported by local air in the Clean Air Reporting Log (CARL) database. The data in document reflects reported data through the 2021 reporting cycle, as of October 2021.

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-effective¹ emission reductions that are permanent, surplus, quantifiable, enforceable, and creditable to the State Implementation Plan (SIP). Covered pollutants include oxides of nitrogen (NO_x), 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 the program, select the projects to fund and contract with the applicants while CARB works collaboratively with the air districts and other stakeholders to establish Guidelines² 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.

¹ 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.

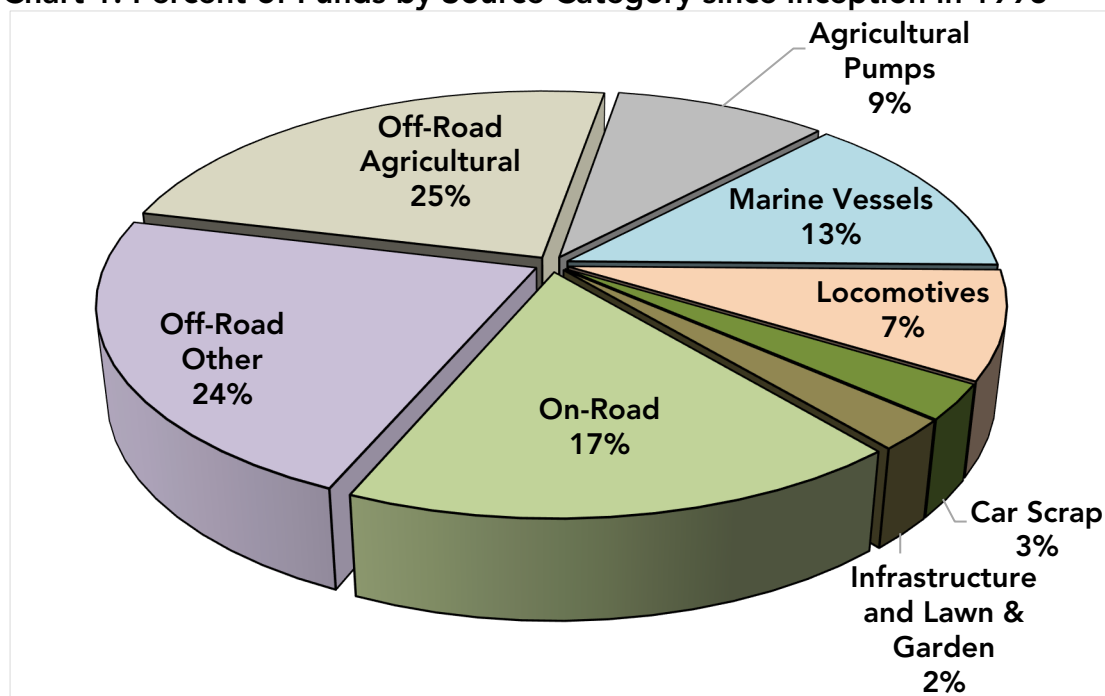
² Carl Moyer Guidelines: <http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>

Background

The Moyer Program funds a variety of project types and source categories that air districts report to CARB on 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 CARL database and the air district certify that the data are accurate and complete.

The pie chart below, generated from Table 2, 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



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 23 (FY 2020-21). Air districts have four years to liquidate each year of funds received. See the table below for examples:

Fiscal Year Allocation	Moyer Funding Year	Liquidation Year ³
2018-19	21	2023
2019-20	22	2024
2020-21	23	2025

³ Liquidation deadline is June 30th of the liquidation year.

Emission Reductions: Emission reductions are 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, transportation refrigeration units, 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.

Environmental Justice: Several new tables show how Moyer funds benefit priority populations including:

- **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.
- **AB 617 Communities:** 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 AB 617 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. Furthermore, the funded vehicle/equipment may not necessarily operate at the applicant and/or owner reported address.

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

- Data for Moyer funding years 1-7 in Table 3 is gathered from the Carl Moyer 2006 Status Report⁴.
 - The 2006 Status Report provided results for Moyer funding years 1-6. Moyer funding year 7 is extrapolated based on an average of the Moyer funding years 1-6 data.
 - 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 8-23 is generated from the CARL database for the 2021 reporting cycle:
 - Moyer funding years 8-19 are fully liquidated; all funds are paid-in-full and the projects they funded are operational.
 - Moyer funding years 20-23 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

There were some minor improvements in the 2021 Moyer Statistics from last year:

- All the data have been updated in the tables below. Funding year 19 was liquidated and funding year 23 was added. An additional \$93 million Moyer funds were executed.
- Updated source category "Stationary and Portable Agricultural Engines" to "Agricultural Pump" throughout tables to make naming convention consistent.

⁴ Carl Moyer 2006 Status Report: <https://ww3.arb.ca.gov/msprog/moyer/status/status.htm>

Results and Tables

Table 1: Moyer Program Summary for Moyer Funding Years 1-23¹

	Count ²	Life NOx+ ROG (tons) ³	Life PM (tons) ³	Funds Executed ⁴	Total Funds Allocation ⁵
Totals	69,911	202,673	7,456	\$1,309,404,761	\$1,599,910,427

1. Table includes reported project information for Moyer funding years 1-23. Moyer funding years 8-23 reflect total funded engines or projects 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 funding years 1-6 data and factored to account for incomplete data - see 2006 Status Report page 9 text.

2. Count includes the number of engines or projects funded including repower, retrofit, car scrap, new purchase, and vehicle/equipment replacements. A vehicle or equipment may have multiple engines. Infrastructure and shore-power counts the number of projects funded.

3. Emission reductions are the total for the life of the project. For Moyer funding years 8-23 "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. 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.

5. Total Funds Allocated includes project and district administration funds for Moyer funding years 1-23 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.

Table 2: Moyer Funding Years 1-23 by General Source Category - Since Inception in 1998

General Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed
On-Road	8,042	25,770	677	\$222,537,548
Off-Road Other	3,444	43,035	1,450	\$308,458,669
Off-Road Agricultural	4,907	26,852	1,192	\$328,350,218
Agricultural Pumps	7,851	61,757	2,381	\$114,185,021
Marine Vessels	2,233	32,601	1,484	\$175,452,507
Locomotives	227	9,295	253	\$93,778,263
Car Scrap	31,417	3,292	17	\$33,718,063
Lawn and Garden Equipment	11,668	70	3	\$1,691,642
Infrastructure	123	N/A	N/A	\$31,232,829
Total	69,911	202,673	7,456	\$1,309,404,761

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 Equipment*	0	0	0	\$0
Infrastructure*	0	N/A	N/A	\$0
Total	8,567	87,434	3,857	\$161,897,759

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

Table 4: Moyer Funding Years 8-23 by General Source Category - from CARL

General Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed
On-Road	5,260	10,344	259	\$175,547,528
Off-Road Other	2,782	29,387	796	\$283,293,255
Off-Road Agriculture	4,750	26,224	1,166	\$326,571,518
Agricultural Pumps	3,525	21,922	603	\$64,332,238
Marine Vessels	1,627	15,972	530	\$140,525,814
Locomotive	192	8,027	226	\$90,594,114
Car Scrap	31,417	3,292	17	\$33,718,063
Lawn and Garden Equipment	11,668	70	3	\$1,691,642
Infrastructure	123	N/A	N/A	\$31,232,829
Total	61,344	115,239	3,600	\$1,147,507,001

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

Moyer Funding Year (fiscal year) ¹	Funds Executed	Project Allocation Funds ²	Total Allocation (including admin) ³
8 (2005-06)	\$100,075,642	\$94,977,599	\$98,341,039
9 (2006-07)	\$96,644,423	\$91,599,870	\$98,042,759
10 (2007-08)	\$93,908,226	\$91,695,316	\$98,215,368
11 (2008-09)	\$84,423,049	\$80,461,822	\$86,410,101
12 (2009-10)	\$72,136,182	\$70,381,770	\$75,441,596
13 (2010-11)	\$79,593,467	\$72,234,034	\$77,245,242
14 (2011-12)	\$74,774,604	\$72,129,676	\$77,230,537
15 (2012-13)	\$67,513,364	\$64,812,283	\$69,491,666
16 (2013-14)	\$68,424,249	\$66,774,215	\$71,494,364
17 (2014-15)	\$73,032,307	\$69,789,975	\$74,742,081
18 (2015-16)	\$73,032,003	\$69,737,576	\$75,017,119
19 (2016-17)	\$76,850,336	\$69,823,226	\$75,057,844
20 (2017-18)*	\$76,996,822	\$81,927,978	\$87,703,242
21 (2018-19)*	\$75,664,963	\$85,162,968	\$90,943,886
22 (2019-20)*	\$33,009,570	\$100,969,757	\$107,800,452
23 (2020-21)*	\$1,427,792	\$95,370,422	\$101,958,776
Total	\$1,147,507,001	\$1,277,848,487	\$1,365,136,070

1. Moyer funding year with an asterisk indicates the funding years that are in progress and are subject to change. Liquidated years 8 - 19 represent fully paid and operational projects.

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 Funding Years 8-23

Source Category	Vehicle/Equipment Type	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed
On-Road	Drayage	19	28	0	\$757,093
	Emergency Vehicle	49	240	16	\$7,852,375
	Heavy Heavy-Duty Vehicle	3,086	5,810	167	\$103,044,254
	Light Heavy-Duty Vehicle	193	211	5	\$5,286,919
	Line Haul	238	398	26	\$6,822,391
	Medium Heavy-Duty Vehicle	141	196	3	\$3,509,691
	School Bus	140	192	2	\$17,053,838
	Solid Waste / Refuse Collection Vehicle	518	1,372	1	\$13,391,336
	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
Off-Road - Agricultural	Balers	6	25	1	\$519,650
	Chippers/Stump Grinders	4	180	6	\$2,465,120
	Combines / Choppers	98	921	27	\$13,941,626
	Generator Sets	3	7	0	\$95,489
	Hydro Power Units	2	6	0	\$124,000
	Mowers	2	2	0	\$79,173
	Other	992	7,429	332	\$97,560,233
	Shredders	1	34	1	\$776,287
	Sprayers	6	29	1	\$397,333
	Swathers	16	78	3	\$1,534,940
	Tractors	3,620	17,514	795	\$209,077,668
	Other	11	11	1	\$158,397

Source Category	Vehicle/Equipment Type	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed
Agricultural Pumps	Portable Agricultural Irrigation Pump	274	782	26	\$5,236,538
	Stationary Agricultural Irrigation Pump	3,240	21,129	576	\$58,937,304
Off-Road - Construction	Bore/Drill Rigs	14	40	1	\$591,443
	Cargo Tractor/Loader	131	1,491	36	\$21,296,830
	Concrete/Trash Pump	1	1	0	\$50,874
	Cranes	46	263	8	\$2,721,767
	Crushing/Processing	7	41	1	\$426,833
	Excavators	101	511	12	\$9,680,599
	Graders	82	442	12	\$6,628,695
	Loaders/Backhoes	169	548	23	\$11,681,018
	Other	100	981	40	\$7,689,575
	Pavers	2	4	0	\$29,361
	Paving Equipment	1	1	0	\$20,261
	Rollers	6	7	1	\$302,361
	Rough Terrain Forklifts	120	147	7	\$3,392,664
	Rubber-Tired Dozers	61	563	11	\$7,690,083
	Rubber-Tired Loaders	271	1,646	43	\$31,501,441
	Scrapers	1,120	19,457	500	\$146,343,391
	Skid Steer Loaders	36	20	2	\$768,920
	Surfacing Equipment	5	21	0	\$268,053
	Tractors	5	4	0	\$90,774
	Trenchers	3	3	0	\$103,575
	Trucks	63	1,553	50	\$12,054,529
Off-Road - Construction	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 Off-Road - Airport Ground Support	A/C Tugs Wide Body	11	37	2	\$771,108
	Belt Loader	19	18	1	\$633,216
	Cargo Tractor/Loader	67	62	3	\$1,875,504
Off-Road - Cargo Handling	Cargo Excavator	1	2	0	\$125,187
	Cargo Forklift	1	0	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	14	12	1	\$493,440
	Forklift Engines	77	313	11	\$1,741,876
	General Industrial	6	19	1	\$610,907
	Industrial Sweepers/Scrubbers	34	10	1	\$573,844
	Material Handling	30	168	4	\$4,860,559
	Other	71	829	21	\$5,612,841
	Transport Refrigeration Units	66	29	2	\$233,180
	Skidders	1	3	0	\$80,144
	Workover Rigs (Mobile)	1	6	0	\$285,423
Off-Road - Forklifts	Forklift Engines	13	10	0	\$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	1	240	14	\$1,000,000
	Passenger	91	2,817	66	\$30,309,551

Source Category	Vehicle/Equipment Type	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed
	Switcher	98	4,840	143	\$57,254,964
Marine Vessels	Auxiliary Engine	28	123	4	\$579,827
	Barge/Dredge	2	1	0	\$36,000
	Charter Fishing Boat	542	2,917	110	\$40,846,294
	Commercial Fishing Boat	561	2,796	101	\$42,981,609
	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
	Ship-Side Shore Power	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	106	670	23	\$9,031,852
Infrastructure	Alternative Fueling Station	80	N/A	N/A	\$22,499,236
	Battery Charging Station	32	N/A	N/A	\$7,174,940
	Line Extension	9	N/A	N/A	\$1,017,403
	Other	1	N/A	N/A	\$531,750
	Stationary Agricultural Pump Electrification	1	N/A	N/A	\$9,500
Car Scrap	Voluntary Accelerated Vehicle Retirement	31,417	3,292	17	\$33,718,063
Lawn and Garden Equipment	Lawn Mower	11,668	70	3	\$1,691,642
Total		61,344	115,239	3,600	\$1,147,507,001

Table 7: Zero-Emission Technology Projects for Funding Years 8-23

Source Category	Vehicle/Equipment Type	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed
On-Road	School Bus	16	14	0.2	\$2,591,037
On-Road	Solid Waste / Refuse Collection Vehicle	2	3	0.0	\$102,361
Off-Road Agriculture	Other	2	2	0.1	\$58,300
Off-Road Other	A/C Tugs Wide Body	9	13	0.4	\$271,638
Off-Road Other	Belt Loader	19	18	1.0	\$633,216
Off-Road Other	Cargo Tractor/Loader	62	57	3.0	\$1,724,206
Off-Road Other	Cargo Yard Truck	4	23	0.7	\$694,500
Off-Road Other	Forklift Engines	32	254	8.9	\$520,361
Off-Road Other	Other	2	6	0.3	\$85,165
Lawn and Garden Equipment	Lawn Mower	11,668	70	2.8	\$1,691,642
Agricultural Pumps	Stationary Agricultural Irrigation Pump	2,049	17,510	459.0	\$38,543,583
Agricultural Pumps	Portable Agricultural Irrigation Pump	11	34	1.6	\$280,029
Marine Vessels	Ship-Side Shore Power	7	564	13.7	\$11,112,779
Infrastructure	Other	1	N/A	N/A	\$531,750
Infrastructure	Battery Charging Station	32	N/A	N/A	\$7,174,940
Total		13,916	18,567	492	\$66,015,507

Table 8: On-Road Alternative Fuel Projects by Air District for Moyer Funding Years 8-23

Air District	Vehicle Type	Fuel Type ¹	Count	Life NO _x + ROG (tons)	Life PM (tons)	Funds Executed
Bay Area AQMD	School Bus	CNG	1	1	0.0	\$209,782
Bay Area AQMD	School Bus	ELEC	4	2	0.1	\$533,463
Bay Area AQMD	School Bus	LPG	2	2	0.0	\$228,375
Bay Area AQMD	Solid Waste / Refuse Collection Vehicle	CNG	29	62	0.0	\$716,300
Sacramento Metropolitan AQMD	School Bus	ELEC	12	12	0.2	\$2,057,574
Sacramento Metropolitan AQMD	Solid Waste / Refuse Collection Vehicle	CNG	2	3	0.0	\$94,463
Sacramento Metropolitan AQMD	Solid Waste / Refuse Collection Vehicle	ELEC	2	3	0.0	\$102,361
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	Drayage	CNG	17	24	0.0	\$702,093
South Coast AQMD	Heavy Heavy-Duty Vehicle	DUAL	1	0	0.0	\$11,377
South Coast AQMD	Light Heavy-Duty Vehicle	CNG	1	1	0.0	\$39,262
South Coast AQMD	Line Haul	CNG	5	3	0.2	\$90,000
South Coast AQMD	Medium Heavy-Duty Vehicle	CNG	13	21	1.1	\$504,010
South Coast AQMD	School Bus	PROP	9	19	0.0	\$1,168,000
South Coast AQMD	Solid Waste / Refuse Collection Vehicle	CNG	74	246	0.0	\$3,258,640
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

Air District	Vehicle Type	Fuel Type ¹	Count	Life NO _x + ROG (tons)	Life PM (tons)	Funds Executed
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			972	2,160	38	\$27,619,259

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

Table 9: Funding in Environmental Justice (EJ) Communities Cumulatively for Funding Years 8-23

Air District	Funds Executed	Funding in EJ	Percent in EJ
Bay Area AQMD	\$155,267,649	\$72,875,974	47%
Sacramento Metropolitan AQMD	\$96,603,939	\$67,366,270	70%
San Diego County APCD	\$75,992,101	\$44,515,616	59%
San Joaquin Valley APCD	\$177,883,303	\$124,435,216	70%
South Coast AQMD	\$466,540,429	\$263,240,226	56%
Total	\$972,287,421	\$572,433,303	59%

Table 10: Moyer Funding in Disadvantaged Communities (DAC) and Low-Income Communities (LIC) Funding Years 8-23

Air District	Funds Executed	Funding in DAC ¹	Percent in DAC ¹	Funding in LIC and DAC ^{1, 2}	Percent in LIC and DAC ^{1, 2}
Amador County APCD	\$247,059	\$0	0%	\$0	0%
Antelope Valley AQMD	\$9,787,665	\$55,285	1%	\$8,312,996	85%
Bay Area AQMD	\$155,267,649	\$22,941,189	15%	\$45,934,533	30%
Butte County AQMD	\$7,011,774	\$769,418	11%	\$3,726,702	53%
Calaveras County APCD	\$1,350,776	\$0	0%	\$644,457	48%
Colusa County APCD	\$4,749,014	\$34,896	1%	\$357,736	8%
Eastern Kern APCD	\$2,673,388	\$1,142,596	43%	\$1,887,175	71%
El Dorado County AQMD	\$1,109,452	\$0	0%	\$192,947	17%
Feather River AQMD	\$7,593,448	\$170,400	2%	\$2,990,371	39%
Glenn County APCD	\$4,315,430	\$0	0%	\$1,500,396	35%
Imperial County APCD	\$5,682,356	\$2,152,262	38%	\$2,587,943	46%
Lake County AQMD	\$1,127,895	\$0	0%	\$589,252	52%
Lassen County APCD	\$2,840,336	\$0	0%	\$819,806	29%
Mendocino County AQMD	\$3,121,238	\$0	0%	\$2,082,153	67%
Modoc County APCD	\$652,148	\$0	0%	\$436,818	67%
Mojave Desert AQMD	\$8,414,939	\$1,382,981	16%	\$4,143,407	49%
Monterey Bay Unified APCD	\$14,790,191	\$1,199,701	8%	\$4,637,414	31%
North Coast Unified AQMD	\$10,510,290	\$60,000	1%	\$7,237,247	69%
Northern Sierra AQMD	\$3,271,708	\$0	0%	\$1,859,846	57%
Northern Sonoma County APCD	\$4,066,810	\$150,000	4%	\$604,600	15%
Placer County APCD	\$2,952,397	\$0	0%	\$399,787	14%
Sacramento Metropolitan AQMD	\$96,603,939	\$10,529,703	11%	\$42,594,929	44%
San Diego County APCD	\$75,992,101	\$12,108,288	16%	\$39,078,414	51%
San Joaquin Valley APCD	\$177,883,303	\$120,175,649	68%	\$133,465,523	75%
San Luis Obispo County APCD	\$7,124,649	\$14,000	0%	\$1,311,354	18%
Santa Barbara County APCD	\$9,669,512	\$385,074	4%	\$3,646,358	38%
Shasta County AQMD	\$9,634,423	\$135,000	1%	\$7,739,906	80%
Siskiyou County APCD	\$4,060,551	\$0	0%	\$3,419,489	84%

Corrected 10/04/2023

Air District	Funds Executed	Funding in DAC ¹	Percent in DAC ¹	Funding in LIC and DAC ^{1, 2}	Percent in LIC and DAC ^{1, 2}
South Coast AQMD	\$466,540,429	\$225,632,637	48%	\$288,017,159	62%
Tehama County APCD	\$4,507,794	\$103,450	2%	\$3,627,890	80%
Tuolumne County APCD	\$2,682,271	\$0	0%	\$1,346,469	50%
Ventura County APCD	\$41,272,067	\$11,160,798	27%	\$21,087,059	51%
Total	\$1,147,507,001	\$410,303,326	36%	\$636,280,136	55%

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 11a: Moyer Projects in AB 617 Communities by Source Category - Funding Year 16-23

Air District	AB 617 Community	Source Category	Count	Life NOx+ ROG (tons)	Total PM (tons)	Funds Executed
Bay Area AQMD	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
Imperial County APCD	El Centro, Heber, Calexico	Infrastructure	1	N/A	N/A	\$229,559
		Off-Road Agriculture	9	22.63	1.25	\$364,261
		On-Road	38	83.61	0.84	\$1,295,000
		Agricultural Pumps	6	11.97	0.37	\$123,184
Sacramento Metropolitan AQMD	South Sacramento - Florin	Car Scrap	2,092	191.15	0.83	\$2,194,508
		Infrastructure	6	N/A	N/A	\$677,462
		Marine Vessels	4	18.05	0.72	\$333,800
		On-Road	5	13.63	0.18	\$160,000
San Diego County APCD	International Border Communities	Off-Road Other	2	0.97	0.08	\$44,418
		On-Road	6	8.30	0.05	\$170,000
	Portside Environmental Justice Neighborhoods	Locomotive	2	113.70	2.67	\$1,739,173
		Marine Vessels	32	500.63	16.05	\$3,838,156
		Off-Road Other	6	15.52	0.51	\$400,278
		On-Road	5	3.54	0.24	\$109,769
	Arvin, Lamont	Off-Road Agriculture	1	0.97	0.11	\$31,050

Air District	AB 617 Community	Source Category	Count	Life NOx+ ROG (tons)	Total PM (tons)	Funds Executed
San Joaquin Valley APCD	Shafter	On-Road	3	6.81	0.03	\$150,000
		Off-Road Agriculture	1	9.81	0.25	\$76,500
		On-Road	2	3.97	0.00	\$65,000
		Agricultural Pumps	1	1.37	0.04	\$15,000
	South Central Fresno	Off-Road Agriculture	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 Pumps	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
South Coast AQMD	Eastern Coachella Valley	Off-Road Agriculture	92	479.47	26.34	\$7,609,382
		Off-Road Other	5	8.17	0.45	\$172,158
		On-Road	4	8.20	0.01	\$150,000
		Agricultural Pumps	2	6.55	0.21	\$119,256
	East Los Angeles, Boyle Heights, West Commerce	Infrastructure	2	N/A	N/A	\$1,113,805
		Off-Road Agriculture	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	Off-Road Other	4	73.74	0.31	\$2,011,217
		On-Road	29	47.38	0.94	\$758,437
		Marine Vessels	2	8.68	0.33	\$214,200

Air District	AB 617 Community	Source Category	Count	Life NOx+ ROG (tons)	Total PM (tons)	Funds Executed
	South East Los Angeles	Off-Road Agriculture	1	4.14	0.23	\$52,202
		Off-Road Other	1	3.40	0.00	\$16,595
		On-Road	31	63.61	1.09	\$1,173,862
	South Los Angeles	Off-Road Agriculture	1	1.40	0.13	\$30,000
		Off-Road Other	5	14.11	0.91	\$467,126
		On-Road	14	21.03	0.04	\$445,000
	Wilmington, Carson, West Long Beach	Infrastructure	3	N/A	N/A	\$2,334,150
		Locomotive	29	1,496.98	44.48	\$19,990,629
		Marine Vessels	185	1,370.77	48.89	\$17,904,058
		Off-Road Other	28	103.15	2.17	\$1,836,955
		On-Road	42	65.10	0.71	\$1,602,855
Total			3,097	5,785	175	\$81,707,477

Table 11b: Moyer Projects in AB 617 Study Areas by Source Category - Funding Year 16-23

Air District	AB 617 Study Areas	Source Category	Count	Life NOx+ ROG (tons)	Total PM (tons)	Funds Executed
Bay Area AQMD	West Oakland Emission Study Area	Car Scrap	38	3.74	0.02	\$43,328
		Marine Vessels	28	1,277.71	36.79	\$2,790,882
San Joaquin Valley APCD	Shafter Emissions Study Area	Off-Road Agriculture	4	41.19	1.18	\$543,050
		Agricultural Pumps	11	67.25	1.08	\$228,538
South Coast AQMD	East Los Angeles, Boyle Heights, West Commerce	Off-Road Other	11	7.74	0.26	\$185,504

Air District	AB 617 Study Areas	Source Category	Count	Life NOx+ ROG (tons)	Total PM (tons)	Funds Executed
		On-Road	344	1,184.76	36.82	\$12,284,700
	San Bernardino Muscoy Emissions Study Area	Off-Road Other	13	104.84	3.22	\$3,032,823
		On-Road	4	7.41	0.10	\$118,679
Total			453	2,695	79	\$19,227,504

Table 12: Program Statistics by Air District and Source Category for Moyer Funding Years 8-23

Air District	Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Amador County APCD	Off-Road Agriculture	2	20	0.7	\$106,260	\$6,473
	Off-Road Other	3	16	0.3	\$95,798	\$11,361
	On-Road	1	2	0.1	\$45,000	\$15,309
Antelope Valley AQMD	On-Road	4	3	0.0	\$110,783	\$29,950
	Off-Road Agriculture	42	202	8.5	\$4,073,309	\$15,578
	Off-Road Other	43	148	7.4	\$4,030,558	\$18,365
	Agricultural Pumps	5	49	1.5	\$302,816	\$6,570
	Car Scrap	741	73	0.4	\$741,000	\$10,612
	Infrastructure	10	N/A	N/A	\$529,200	N/A
Bay Area AQMD	Car Scrap	27,266	2,827	14.6	\$29,212,490	\$11,021
	Infrastructure	4	N/A	N/A	\$2,076,684	N/A
	Locomotive	27	920	26.2	\$10,547,454	\$7,559
	Marine Vessels	367	8,094	248.5	\$33,505,343	\$11,466
	Off-Road Agriculture	716	1,079	59.6	\$38,808,778	\$18,964
	Off-Road Other	354	2,262	86.2	\$27,715,888	\$14,524
	On-Road	418	710	13.6	\$13,336,574	\$16,527

Air District	Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
	Agricultural Pumps	6	18	0.6	\$64,438	\$4,089
Butte County AQMD	Off-Road Agriculture	97	343	21.6	\$2,833,685	\$7,288
	Off-Road Other	16	46	1.3	\$782,527	\$16,120
	On-Road	25	42	1.1	\$1,769,718	\$110,207
	Agricultural Pumps	93	244	8.9	\$1,625,843	\$6,223
Calaveras County APCD	Infrastructure	1	N/A	N/A	\$40,132	N/A
	Lawn and Garden Equipment	11	0	0.0	\$1,595	\$13,941
	Off-Road Other	2	45	1.6	\$189,839	\$4,094
	On-Road	12	29	1.8	\$1,119,210	\$66,334
Colusa County APCD	Off-Road Agriculture	20	102	23.5	\$808,708	\$5,877
	Agricultural Pumps	185	1,645	59.4	\$3,940,306	\$2,818
Eastern Kern APCD	Off-Road Other	12	59	1.9	\$905,636	\$11,521
	On-Road	12	17	0.8	\$1,196,490	\$53,702
	Agricultural Pumps	23	49	1.0	\$571,263	\$10,791
El Dorado County AQMD	Lawn and Garden Equipment	633	4	0.1	\$91,567	\$25,696
	Off-Road Other	1	6	0.2	\$285,423	\$30,006
	On-Road	6	6	0.0	\$732,462	\$120,585
Feather River AQMD	Off-Road Agriculture	136	474	24.1	\$5,351,858	\$10,173
	Off-Road Other	3	4	0.2	\$116,609	\$14,437
	On-Road	8	4	0.0	\$983,098	\$263,833
	Agricultural Pumps	94	220	9.0	\$1,141,882	\$6,162
Glenn County APCD	Off-Road Agriculture	58	190	9.4	\$2,011,999	\$6,416
	Off-Road Other	2	9	0.3	\$144,665	\$11,647

Air District	Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
	On-Road	6	0	0.5	\$77,556	\$8,433
	Agricultural Pumps	172	555	20.6	\$2,081,209	\$3,953
Imperial County APCD	Infrastructure	1	N/A	N/A	\$229,559	N/A
	Off-Road Agriculture	87	234	11.3	\$3,582,045	\$9,379
	Off-Road Other	1	3	0.2	\$90,000	\$15,462
	Agricultural Pumps	92	151	4.9	\$1,780,752	\$9,465
Lake County AQMD	Off-Road Other	2	4	0.1	\$91,976	\$14,023
	On-Road	8	11	1.1	\$998,482	\$132,504
	Agricultural Pumps	3	3	0.1	\$37,437	\$7,937
Lassen County APCD	Off-Road Agriculture	54	125	6.1	\$1,968,357	\$11,560
	Off-Road Other	5	16	0.4	\$303,483	\$13,511
	On-Road	2	4	0.1	\$75,000	\$15,072
	Agricultural Pumps	25	152	5.7	\$493,496	\$4,760
Mendocino County AQMD	Marine Vessels	16	154	5.3	\$881,558	\$7,751
	Off-Road Agriculture	8	38	1.3	\$516,995	\$10,435
	Off-Road Other	9	47	9.5	\$653,483	\$9,935
	On-Road	21	11	1.2	\$354,980	\$12,544
	Agricultural Pumps	23	57	2.2	\$714,222	\$13,637
Modoc County APCD	Off-Road Agriculture	8	18	0.9	\$327,602	\$13,121
	Off-Road Other	4	41	1.4	\$155,914	\$5,413
	On-Road	1	5	0.3	\$60,000	\$5,914
	Agricultural Pumps	5	9	0.3	\$108,632	\$8,548
	Car Scrap	1,001	101	0.5	\$1,186,383	\$12,351
	Infrastructure	7	N/A	N/A	\$1,310,633	N/A

Air District	Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Mojave Desert AQMD	Locomotive	2	242	14.9	\$1,323,712	\$6,748
	Off-Road Agriculture	23	171	9.5	\$2,428,687	\$9,821
	Off-Road Other	20	124	4.9	\$2,106,115	\$13,224
	On-Road	2	2	0.1	\$59,408	\$16,084
Monterey Bay Unified APCD	Infrastructure	3	N/A	N/A	\$298,143	N/A
	Marine Vessels	84	355	11.9	\$4,908,237	\$11,096
	Off-Road Agriculture	52	215	10.3	\$4,145,835	\$8,870
	Off-Road Other	25	170	7.3	\$4,289,789	\$14,563
	Agricultural Pumps	43	154	4.6	\$1,148,187	\$6,739
North Coast Unified AQMD	Marine Vessels	41	418	14.0	\$2,637,412	\$5,223
	Off-Road Agriculture	65	180	13.7	\$3,105,709	\$10,964
	Off-Road Other	10	91	3.0	\$652,532	\$7,130
	On-Road	91	243	8.5	\$4,114,637	\$12,587
Northern Sierra AQMD	Infrastructure	2	N/A	N/A	\$21,626	N/A
	Off-Road Agriculture	14	67	2.8	\$1,332,931	\$12,123
	Off-Road Other	17	60	2.2	\$1,302,767	\$15,231
	On-Road	12	18	1.5	\$614,384	\$20,241
Northern Sonoma County APCD	Infrastructure	1	N/A	N/A	\$150,000	N/A
	Marine Vessels	3	12	0.4	\$194,100	\$10,684
	Off-Road Agriculture	76	96	7.1	\$2,887,568	\$15,645
	Off-Road Other	3	10	0.4	\$122,100	\$10,846
	On-Road	5	14	0.4	\$265,000	\$13,560
	Agricultural Pumps	21	24	0.7	\$448,042	\$12,969
	Infrastructure	2	N/A	N/A	\$172,731	N/A

Air District	Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Placer County APCD	Off-Road Agriculture	16	48	2.9	\$1,918,375	\$21,786
	Off-Road Other	2	3	0.2	\$112,841	\$18,215
	On-Road	5	3	0.0	\$748,450	\$241,084
Sacramento Metropolitan AQMD	Infrastructure	21	N/A	N/A	\$7,845,584	N/A
	Locomotive	41	1,335	37.2	\$12,933,763	\$5,509
	Marine Vessels	10	39	1.0	\$235,786	\$6,150
	Off-Road Agriculture	597	2,597	92.4	\$49,338,327	\$12,628
	Off-Road Other	129	827	27.4	\$10,180,626	\$10,508
	On-Road	193	268	17.4	\$6,675,344	\$24,374
	Agricultural Pumps	635	2,303	69.2	\$9,394,510	\$6,016
San Diego County APCD	Infrastructure	2	N/A	N/A	\$1,000,000	N/A
	Locomotive	10	974	22.5	\$13,027,309	\$10,682
	Marine Vessels	205	1,462	48.0	\$17,677,011	\$11,515
	Off-Road Agriculture	123	415	24.2	\$9,114,866	\$13,103
	Off-Road Other	229	1,383	50.0	\$23,567,951	\$14,474
	On-Road	376	593	10.9	\$11,060,975	\$17,463
	Agricultural Pumps	20	111	3.5	\$543,990	\$7,774
San Joaquin Valley APCD	Locomotive	29	2,002	57.1	\$19,204,476	\$4,497
	Off-Road Agriculture	1,261	12,815	503.3	\$100,442,918	\$6,552
	Off-Road Other	94	1,268	44.6	\$11,342,453	\$9,432
	On-Road	492	840	40.0	\$14,475,998	\$14,571
	Agricultural Pumps	1,691	15,114	372.0	\$32,417,458	\$3,592
	On-Road	31	69	1.5	\$1,823,941	\$45,881
	Off-Road Agriculture	49	86	4.0	\$2,345,485	\$16,400

Air District	Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
San Luis Obispo County APCD	Off-Road Other	19	73	2.4	\$1,265,062	\$12,546
	Marine Vessels	5	8	0.3	\$139,563	\$21,148
	Agricultural Pumps	38	121	3.4	\$752,399	\$6,226
	Car Scrap	639	65	0.3	\$722,600	\$11,489
	Infrastructure	1	N/A	N/A	\$75,600	N/A
Santa Barbara County APCD	Car Scrap	1,770	227	0.9	\$1,855,590	\$10,509
	Infrastructure	2	N/A	N/A	\$30,564	N/A
	Marine Vessels	42	78	2.7	\$1,592,484	\$14,428
	Off-Road Agriculture	55	181	8.3	\$3,986,945	\$13,866
	Off-Road Other	16	78	3.6	\$930,201	\$13,282
	On-Road	19	11	0.3	\$710,458	\$65,374
	Agricultural Pumps	25	120	3.6	\$563,271	\$5,929
Shasta County AQMD	Off-Road Agriculture	105	326	14.9	\$3,621,380	\$6,928
	Off-Road Other	24	88	4.0	\$1,292,363	\$9,288
	On-Road	90	260	5.6	\$4,491,657	\$13,408
	Agricultural Pumps	13	43	1.6	\$229,023	\$4,861
Siskiyou County APCD	Off-Road Agriculture	4	39	1.4	\$293,022	\$5,034
	Off-Road Other	10	53	1.9	\$766,000	\$12,824
	On-Road	37	64	2.0	\$2,992,135	\$90,818
	Agricultural Pumps	1	12	0.4	\$9,394	\$552
South Coast AQMD	Infrastructure	62	N/A	N/A	\$16,726,996	N/A
	Lawn and Garden Equipment	11,024	67	2.6	\$1,598,480	\$14,850
	Locomotive	83	2,555	68.6	\$33,557,401	\$9,593
	Marine Vessels	738	4,746	174.7	\$70,667,714	\$11,807

Air District	Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
	Off-Road Agriculture	413	3,508	172.5	\$52,725,657	\$11,370
	Off-Road Other	1,695	21,904	513.6	\$187,577,572	\$11,910
	On-Road	3,325	6,957	147.9	\$103,406,687	\$13,195
	Agricultural Pumps	6	67	1.0	\$279,922	\$6,006
Tehama County APCD	Off-Road Agriculture	74	203	11.1	\$2,607,779	\$10,925
	Off-Road Other	1	0	0.0	\$28,600	\$30,062
	On-Road	10	68	0.5	\$782,469	\$12,072
	Agricultural Pumps	51	151	8.0	\$1,088,946	\$6,571
Tuolumne County APCD	Infrastructure	1	N/A	N/A	\$26,132	N/A
	Off-Road Agriculture	15	60	2.2	\$950,348	\$13,678
	Off-Road Other	7	29	1.3	\$305,272	\$10,805
	On-Road	21	24	1.3	\$1,400,519	\$91,668
Ventura County APCD	Infrastructure	3	N/A	N/A	\$699,244	N/A
	Marine Vessels	116	606	22.7	\$8,086,606	\$9,730
	Off-Road Agriculture	580	2,391	118.8	\$24,936,091	\$6,108
	Off-Road Other	24	517	17.9	\$1,889,212	\$3,923
	On-Road	27	68	0.5	\$1,066,113	\$21,784
	Agricultural Pumps	255	552	20.5	\$4,594,801	\$6,529
Total		61,344	115,239	3,600	\$1,147,507,001	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.