



Chapter 6

Incentive Programs



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Chapter 6: Incentive Programs

Incentive programs are an integral part of the District's emissions reduction effort. These programs provide an effective way to accelerate emissions reductions and encourage technology advancements, particularly in the mobile source sector, a sector not directly under the District's regulatory jurisdiction. Given that 80% of the Valley's NO_x emissions come from mobile sources, these successful voluntary incentive grant programs help the Valley achieve highly cost-effective emissions reductions beyond the District's regulatory bounds that are surplus of the reductions required by regulations.

The District operates one of the largest and most well-respected voluntary incentive programs in the state. Through strong advocacy at the state and federal levels, the District has increased its incentive funding levels over the past five years to a proposed incentive program appropriation of \$182 million in the 2012–2013 District Budget. Since the District's inception in 1992, considerable funding has been expended in support of clean-air projects in the Valley. These projects have achieved significant emissions reductions with corresponding air quality and health benefits. The District typically requires match funding of 30% to 70% from grant recipients. To date, grant recipients have provided \$487,256,276 in matching funds, with a combined District and grant recipient funding investment of \$919 million.

Over the past 10 years, the District has provided incentive funding to purchase, replace, or retrofit thousands of pieces of equipment, including the following:

- 4,584 agricultural irrigation pump engines
- 726 agricultural equipment replacements
- 945 off-road equipment repowers
- 2,434 heavy-duty trucks
- 1,879 school bus retrofits
- 432 school bus replacements
- 3,585 lawnmower replacements
- 2,318 fireplace change-outs
- 18,476 commuter subsidies
- 35 locomotive replacements
- 396 new alternative-fuel, light-duty vehicles
- 706 vehicle retirements (car crushing)
- 17 bicycle infrastructure projects (bike paths)

The District's incentive programs continue to be a model for other agencies throughout the state. Recent audits noted the District's efficient and effective use of incentive grant funds in reducing air pollution. The District has been collaborating with the U.S. Environmental Protection Agency (EPA) to establish criteria for quantifying incentive program emissions reductions for use in state implementation plans (SIP).

6.1 INCENTIVE FUNDING

The District is engaged at every level of state and federal government to craft policy and funding targets that account for the Valley's unique challenges and need to accelerate emissions reductions, particularly from sources not under the District's regulatory authority. Toward that end, the District is working closely with the Valley's legislative delegation to ensure that the Valley's needs are well represented in discussions of where to focus funding throughout the state and the region as a whole. In addition, the District is focused on how to effectively allocate the limited funding received for its incentive programs.

6.1.1 Funding Sources

The District continues to dedicate significant effort to ensure that the San Joaquin Valley receives its share of state and federal incentive funds through a variety of sources. In addition to aggressively pursuing funding from state funding sources such as the Carl Moyer Program and Lower-Emission School Bus Program, the District has been very successful in securing grants from the highly-competitive federal Diesel Emissions reductions Act (DERA) and the state AB 118 Air Quality Improvement Program (AQIP).

While demand for incentive programs continues to be strong, many of the funding sources for these programs are scheduled to sunset during the implementation time frame of this plan, unless funding is renewed. These programs include, but are not limited to, Proposition 1B, which provided \$1 billion statewide to reduce goods-movement emissions; AB 923, which authorized a \$2-per vehicle DMV fee and additional statewide funding for the Carl Moyer program; and AB 118, which provides \$200 million statewide for alternative and renewable fuel projects, as well as vehicle technology projects.

The single largest source of funding for the District's incentive programs is the Proposition 1B program, which uses bond funds for a variety of state transportation priorities. The District aggressively pursued its share of Proposition 1B funding, and the Valley will receive approximately \$250 million over the life of the program. The District will receive its last allocation of Proposition 1B funding in fiscal year 2013-2014.

The Carl Moyer program has been an on-going and reliable source of funding since 1998. The Carl Moyer program, as it operates today, was established in 2004 with the adoption of AB 923 and SB 1107; the latter provided increased and continued funding through 2014 and expanded the program to include light-duty vehicle projects and agricultural sources of air pollution. In total, the District receives approximately \$14 million per year in Carl Moyer and other funding under AB 923. Without further action by the legislature, funds authorized by AB 923 will sunset on January 1, 2015.

In 2007, the California legislature approved AB 118: the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007. AB 118 provides approximately \$200 million annually through 2015 for three new

programs to fund air quality improvement projects and develop and deploy technology and alternative and renewable fuels. The bill creates a dedicated revenue stream for the programs through increases to the smog abatement, vehicle registration, and vessel registration fees. AB 118 is designed to reduce emissions of criteria pollutants and greenhouse gas emissions and to deploy advanced technology. Most AB 118 programs are administered on a statewide basis. While the District has administered some of the AB 118 programs for the state, these programs have not been a significant portion of the District's incentive program revenue. However, in the future, these funds may be more important, particularly as the District becomes more involved in technology advancement projects. AB 118 funding will sunset on January 1, 2016.

6.1.2 Incentive Strategy

Each of the funding sources administered by the District includes different guidelines and statutory requirements for using the funds. Beyond the specific guidelines of each funding source, the District considers the following common factors when deciding how and where to spend incentive funds:

Cost-effectiveness – An important factor when considering where to invest District funds is determining which types of projects and programs will give the District the greatest return on its investment. This is typically represented in dollars per ton of emissions reduced. While cost-effectiveness is a primary factor, the District also considers projects that may not have the highest cost-effectiveness, but that provide other benefits, such as the advancement of new technology or community involvement (as described below).

Inventory of available projects – This factor is critical in all District incentive programs. To date, the District has been extremely successful in designing programs that have broad appeal and applicability across multiple industries. Over the past 10 years, this level of interest has resulted in a substantial backlog of eligible projects waiting for funding. Unfortunately, many of those on waiting lists have since moved into a regulated class, making them ineligible for funding, in most cases. As a result, the District must continue to not only work within the existing regulations to find cost-effective, surplus project categories, but also to focus future funding in areas where a significant inventory of eligible projects still exists.

Required expenditure timeframes – Each funding source that the District administers generally requires obligation and expenditure by certain deadlines. These deadlines greatly impact funding priorities and choice of projects. The District may prioritize a funding category over others because of the timeframe associated with a particular funding source. For instance, priority may be given to certain projects that can reasonably be expected finish prior to the deadline for that specific fund over other projects of equal relevance or cost-effectiveness, but with longer expected completion times. Again, the flexibility of this option works in concert with the dynamic nature of the incentive programs, projects, expenditure deadlines.

Upcoming regulatory deadlines – To ensure that incentive programs obtain the maximum SIP-creditable emissions reductions, the District performs a thorough analysis of all local, state, and federal regulations relating to the target categories. In addition, the District works proactively with the regulating agencies during the rule development process to understand the potential impacts of that rule on incentive projects and to ensure that opportunities for early incentive funding are maximized. These analyses determine which types of projects can be funded, for how long projects can be funded, which also impacts the potential cost-effectiveness of those projects.

Health benefits – In addition to emissions reductions needed to attain air quality standards, the District also seeks incentive projects that provide direct health benefits to Valley residents. For instance, the District's Lower-Emission School Bus Program reduces exposure to children from toxic diesel particulates, even though this source is not one of the largest sources of regional particulate pollution.

Promoting technology advancement – Funding projects that demonstrate and advance new emission reduction technologies will be essential for meeting increasingly stringent air quality standards given the Valley's existing challenges. The District's recent adoption of the Technology Advancement Program emphasizes the priority given to this area.

Environmental Justice – The District places a strong emphasis in providing funding in a manner that benefits environmental justice communities. The District has worked cooperatively with the Environmental Justice Advisory Group to understand the Valley's environmental justice issues and to craft programs that reduce emissions in these areas.

Community involvement/benefits – The District develops and administers programs with an emphasis on community involvement. Some examples of these are the Clean-Green-Yard-Machine program, Drive Clean! Rebate program, Burn Cleaner program, Transit Pass Subsidy program, and the Polluting-Automobile Scrap and Salvage program.

6.1.3 Statutory Constraints on Incentive Funding

The District's current incentive funding comes from a range of local, state, and federal funding sources. Each funding source places restrictions on the types of projects that may be funded, the funding limits, expenditure deadlines, and the administrative approach for distribution. These requirements vary significantly from one funding source to another, resulting in a complex matrix of funding categories and program requirements. Some key examples are listed below:

Proposition 1B Goods Movement – Funding for this program must be used on heavy duty trucks and locomotives. The program procedures require that a Request-for-Proposals (RFP) process is used and that the most cost-effective projects are funded first.

Lower-Emission School Bus – Funding for this program must be used on school bus replacements or retrofits. The program requires that all retrofits be prioritized and that the oldest buses are replaced first.

Carl Moyer – Funding is predominately used for heavy-duty diesel equipment projects. The program has strict funding caps and cost-effectiveness requirements.

DMV Funds – Funding must be used primarily for on-road and off-road mobile sources. Portions of funds must follow state Carl Moyer and Lower-Emission School Bus guidelines.

Advanced Emission Reduction Option Funds – Funding is for emission reduction incentive projects. The District's Governing Board has discretion as to where to apply these funds using the District's annual budget process to allocate this funding.

Indirect Source Review (ISR) Funds – Funding preference is given to emissions reductions opportunities near development projects.

6.2 SIP CREDITABILITY OF INCENTIVE PROGRAMS (RULE 9610)

Historically, states and local air agencies have not been able to obtain SIP credits for incentive-based reductions. When given SIP credit, incentive-based emissions reductions can be used alongside regulatory-based emissions reductions to meet federal Clean Air Act requirements, such as demonstrating attainment with air quality standards at a future date or demonstrating that emissions reductions meet reasonable further progress requirements. Given the heavy investment from the public and private sectors in replacing equipment under these voluntary incentives, establishing a general framework to receive SIP credit for these emissions reductions is critical for ensuring the continued success of these programs. The District, EPA, Air Resources Board (ARB), and United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) have recognized the importance of this issue, and signed a Statement of Principles in December 2010 that established a general framework for ensuring that reductions in air emissions resulting from voluntary incentives to replace off-road agricultural equipment received credit in the SIP. The MOU states that the District, NRCS, ARB and EPA will work collaboratively to develop a mechanism to provide SIP credit for emissions from incentive programs that are surplus, quantifiable, enforceable, and permanent. Additionally, in July 2012, EPA and USDA agreed to specifically implement this concept to ensure that emissions reductions from incentive programs were given their proper credit in the SIP context.

As with rules adopted by the District, EPA guidance requires that emissions reductions achieved through voluntary incentive programs be demonstrated to be surplus, quantifiable, and enforceable in order for those reductions to receive SIP credit. Additionally, EPA guidance requires extensive documentation of emissions reductions proposed for SIP credit with ongoing follow-up and tracking of the emissions reductions.

In order to be surplus, emissions reductions from voluntary incentive programs generally must not be required by any local, state, or federal regulations. Quantifiable emissions reductions are calculated using methodologies of state programs or other publically developed methodologies. To ensure enforceable emissions reductions, creditable programs require mechanisms such as legally binding agreements with program participants and physical inspections to verify the completion of projects. District incentive programs have been designed to meet the surplus-quantifiable-enforceable criteria. Additionally, all criteria and reporting mechanisms are transparent to the public.

The District has conferred with EPA regarding the process for documenting and submitting the information necessary to receive SIP credit for incentive-based emissions reductions. The framework for establishing this SIP credit will be in the form of a new District rule. District Rule 9610 will establish the documentation, reporting, and public review process for the District to take credit in the SIP for emissions reduced through incentives. Chapter 9 discusses how these SIP-creditable incentives reductions would be incorporated into the SIP for purposes of this PM2.5 plan.

6.3 CURRENT DISTRICT PROGRAMS

The District offers numerous incentives programs to reduce emissions from a variety of equipment types such as heavy duty engines, school buses, and lawn and garden equipment. The District places particular emphasis on providing incentives to environmental justice communities. To date, the District has awarded \$432 million in incentive funding resulting in 93,349 tons of lifetime emissions reductions. District staff will continue to expand on the success of its current programs and craft new incentive programs for additional emissions reductions from Valley sources.

The following summarizes incentive programs the District currently implements:

6.3.1 Heavy-Duty Trucks

The District has administered numerous incentive programs targeted at on-road heavy-duty trucks, one of the biggest sources of NO_x emissions in the Valley. Through the state's Proposition 1B Goods Movement Emission Reduction Program, Carl Moyer Voucher Incentive Program (VIP), and other District-operated voucher incentive programs funded by grants from EPA and locally generated incentive funds, the District has replaced hundreds of older, high-polluting trucks with cleaner trucks certified to meet the latest ARB emissions standards.

The District's truck voucher programs have been designed to provide an alternative source of incentive funding for small businesses that do not qualify for funding under the Proposition 1B Program. The District contracts with Valley dealerships and makes the review and approval process efficient and streamlined to provide vouchers to truck operators.

6.3.2 Agricultural Pumping Engines

The District provides up to 85% funding for farmers looking to replace older, dirtier diesel engines with low-emission Tier 4 engines or zero-emission electric motors. Agriculture accounts for a majority of the local economy, and this program not only provides for significant emissions reductions from agricultural operations, but provides economic relief to Valley farmers, ranchers, and dairy operators. Eligible projects are funded with local, state, and federal sources, including but not limited to District Indirect Source Review (ISR) mitigation fees, Carl Moyer Program funding, AB 923 funding, Federal Designated Funding, and Federal Diesel Air Shed Grant funding. In the past, collaboration with the California Public Utilities Commission and local utilities has allowed for additional incentives on electric line extensions and special rate schedules, enhancing participation in the District's replacement program.

Over the past ten years, the District has funded the replacement of over 4,584 agricultural pump engines, with more projects currently in the queue. Over 2,000 of these replacements involved replacing older diesel engines with electric motors. The District has seen an increased demand for emissions-compliant diesel-engine repowers to electric motors in recent years. This option is ideal for both parties, since the District achieves the maximum emissions reductions with electric motor repowers and farmers lower their operating costs by switching to electricity, a more affordable fuel source. The District will consider pursuing a renewed public/private collaborative partnership similar to the previously mentioned partnership to provide further incentives for replacing remaining agricultural IC engines with electric motors, potentially including assistance for line extensions for remotely located wells.

For a typical irrigation pump project, District staff will verify that the old engine is operational and eligible. If so, the engine owner is offered the incentive and has the new engine or motor installed, making sure that the old engine is sufficiently disabled. District staff conducts a post-inspection prior to payment to document the new engine or motor's specifications and to ensure the emissions reductions are accurate. Ongoing monitoring and reporting ensures the projects meet contracted emissions reductions targets.

6.3.3 Agricultural Equipment

Off-road agricultural equipment replacements and repowers play a crucial role in reducing emissions. These equipment units, including tractors, backhoes, wheel loaders, and other off-road farming vehicles are widely used in the Valley, and are essentially uncontrolled and unregulated. Eligible projects are funded with local, state, and federal sources, including but not limited to ISR, Carl Moyer funding, AB923 funding, Federal Designated funding, and Federal Diesel Air-Shed Grant.

The District has funded the repower and replacement of over 1,017 off-road agricultural vehicles, with more projects currently in the queue. It is estimated that a large inventory of vehicles that qualify for repower or replacement still exists, and the program has the

potential for significant and very cost-effective emissions reductions. Whether a farmer wishes to repower the current equipment with a cleaner engine or replace the equipment altogether, this program allows the District to achieve surplus emissions reductions while also facilitating the early equipment retirement and fleet turnover, both of which result in more efficient farming operations with less overall hours of operation.

An important component of the District's incentive efforts in this category has been its collaboration with the NRCS to replace agricultural tractors. Over the course of this collaborative tractor replacement program, the District has obligated \$21.4 million in incentive funds, NRCS has obligated \$72.2 million, and this has leveraged \$89.9 million in applicant cost share for new tractors. This \$183 million investment by the District, NRCS, and Valley farmers has resulted in significant emissions reductions, and work is underway with EPA to ensure the reductions from this investment can be credited to the SIP.

In both repower and replacement projects, the farmer enters into an agreement with the District to replace the old, dirty engine or vehicle with newer, cleaner technology. District staff first performs a pre-inspection to determine that the equipment and engine are operational. Then a final inspection is performed to verify the new equipment, as well as witness the old equipment and engine's destruction at a District-approved recycling or scrapping facility, ensuring the old equipment and engine will never be put back into service. Ongoing monitoring and reporting ensure the expected emissions reductions and operation of the equipment meet the grant agreement requirements.

6.3.4 Locomotives

The emissions from goods movement are a significant source of diesel particulate matter (PM) in the Valley and the state, and many of the larger cities in the Valley are home to locomotive rail yards. Locomotives, in particular, present a considerable health risk from diesel PM emissions. Residential areas located close to rail yards have shown a significant increase in cancer risk and can equal or exceed the regional background or regional health risk levels. The locomotive component of the Heavy-Duty Engine Program awards up to 85% grant funding for newer, cleaner diesel locomotive engines and locomotive replacements. Eligible projects are funded with local, state, and federal sources, including but not limited to the Carl Moyer Program, the Federal Diesel Air Shed Grant, and DERA funding.

The District has funded the repower or replacement of 11 locomotives, with more projects currently in the queue. One of the major benefits to the locomotive repower and replacement program is increased efficiency and longevity as a result of the revolutionary GenSet engine technology. The GenSet system uses multiple smaller off-road tier-4 emission level engines mounted on a single chassis. This system allows for each of the engines to be fired up individually so that in low-power demand situations only one of the engines can be used, helping to reduce unnecessary emissions. In addition, this system comes equipped with idle reduction technology that will shut down the engine during periods of inactivity.

The District funds locomotive repower or replacement projects through an RFP procurement process, and reviews and selects recipients based on established scoring criteria. During the pre-inspections, all necessary locomotive engine information is verified by District inspectors and documented in digital photographs. Upon verification of all information, District staff enters into an agreement with the recipient for the project. Once the replacement switcher locomotive engine has been purchased and the original engine has been dismantled, the recipient will complete and return the claim-for-payment packet, and a post-inspection is performed, prior to payment, to verify the new information. Monitoring and reporting continue for the duration of the agreement to ensure the emissions reductions expected from the project occur.

6.3.5 Forklifts

The District funds the replacement and retrofit of forklifts through its Large Spark-Ignited (LSI) forklift retrofit program and its Electric Forklift New-Purchase program. Because emission standards for new engines in this source category have only been in effect for the past few years, a significant number of high-emitting units are still in operation and available for retrofit. Operators can meet the proposed in-use fleet-average emission standards by purchasing low- and zero-emission equipment and by retrofitting uncontrolled equipment in their fleets. The use of new controlled engines and the retrofit of existing engines can reduce fuel use and improve engine life, thus creating cost savings that offset a portion of the additional equipment cost. Eligible projects are funded with federal, state, and local sources, including Carl Moyer Program funds and motor vehicle surcharge fees.

The District has funded 17 forklift projects. The installation of a LSI retrofit system will improve engine operation and reduce fuel use. Closed-loop fuel systems generally improve the engine's overall efficiency. There is an estimated 10% to 20% reduction in fuel consumption with engines using closed-loop systems. An electric forklift has an obvious advantage as an emission-free vehicle, but can typically cost \$1,500 to \$5,000 more than a comparable LSI forklift. However, since an electric forklift has a longer useful life and reduced fuel and maintenance costs, the electric forklift can reduce life-cycle costs compared to a LSI forklift.

The forklift program is an over-the-counter program, in that applications are continually accepted on a first-come-first-served basis. Contrary to many of the off-road or agricultural components in the Heavy-Duty Engine Program, a pre-inspection is not required for the new electric forklift component (LSI retrofits are pre-inspected to ensure emissions are real and quantifiable). After contracts are awarded and the new equipment is purchased and installed, post-inspections are performed to ensure emissions reductions are accurately recorded and ongoing monitoring and reporting are required to ensure the emissions reductions occur.

6.3.6 School Bus Replacement and Retrofit

School bus replacements and retrofits play a vital role in reducing school children's exposure to both cancer-causing and smog-forming pollution. The School Bus Replacement and Retrofit programs provide grant funding for new, safer school buses and air pollution control equipment (retrofit devices) on buses that are already on the road. Public school districts in California that own their buses are eligible to receive funding. Eligible projects are funded with local, state, and federal funds including the Lower-Emission School Bus Program (Proposition 1B), DERA funding, and the American Reinvestment and Recovery Act (ARRA).

The District has provided funding to retrofit 1,879 school buses and replace 432 school buses. New buses purchased to replace older buses may be fueled with diesel or an alternative fuel, such as compressed natural gas (CNG), provided that the required emissions standards specified in the current guidelines for the Lower-Emission School Bus Program are met. Funds are also available for replacing on-board CNG tanks on older school buses and for updating deteriorating natural gas fueling infrastructure. Commercially available hybrid-electric school buses may be eligible for partial funding.

Eligible school buses are selected based on specific program requirements, including replacing the oldest models first. After determining eligibility, school districts are awarded contracts that provide a reasonable time period for project completion. A claim-for-payment form must also be submitted before funds can be awarded.

6.3.7 Community Incentives

While all of the District's incentive programs are open to residents of the Valley, there are a number of programs, such as the Heavy-Duty Engine Program and the Proposition 1B Goods Movement Emission Reduction Incentive Program, that are specifically designed for Valley businesses. These programs focus on replacing or retrofitting large diesel-powered equipment such as trucks, tractors, and agricultural irrigation pump engines. These programs are highly efficient and extremely cost-effective. Of equal importance, the District currently operates several incentive programs designed for the general public. These programs give the general public the opportunity contribute to the our goal of cleaner air for all Valley residents.

The District's community incentives include a wide range of project types and source categories. Current community incentive programs include the following:

Burn Cleaner Program – The Burn Cleaner Program helps Valley residents upgrade their current wood-burning devices and open fireplaces to natural gas, propane gas, or clean pellet devices. The District offers a financial incentive to any interested resident and an additional incentive to low-income residents through a streamlined voucher program that involves partnering with interested retailers. The program has upgraded over 2,300 wood-burning devices, and continues to receive a steady stream of applicants.

Polluting Automobile Scrap and Salvage (PASS) – The PASS program offers cash incentives for participants who have retired their older vehicle; a voucher toward the replacement of an older high-emitting vehicle with a newer cleaner vehicle; and, recently added, a voucher for emissions-related repairs to high-emitting vehicles. The program has replaced 202 high-emitting vehicles with newer, cleaner vehicles, retired 504 additional vehicles for a lower cash incentive, screened nearly 5,000 vehicles for high emissions, and provided nearly 3,000 vouchers for emissions-related repairs. The program has been operated with locally generated incentive funds and will continue to retire and replace vehicles utilizing funding provided by the State’s Enhanced Fleet Modernization Program. Vehicle repairs were conducted with grant funding from the Reformulated Gasoline Settlement Fund created as a result of an antitrust class action, and it will continue to be funded using locally generated incentive funds.

Clean-Green-Yard-Machine (CGYM) – The CGYM program helps clean the Valley’s air through incentives for residents to retire their old gas mowers in favor of nonpolluting, electric mowers. The program has used locally generated incentive funds as well as funding from the State’s AQIP. Over the past two years, the program has replaced over 3,500 gas lawn mowers with clean electric models.

Drive Clean! Rebate Program – During the 2011–2012 fiscal year, the District revamped its incentive program structure to encourage Valley residents to drive advanced, clean vehicles, including electric and other alternative-fueled vehicles. In addition to clean-vehicle rebates, the Drive Clean! Program includes incentives that cover a portion of the charging infrastructure cost associated with electric vehicles.

Alternatives to Professionally Managed Pyrotechnic Firework Displays – In 2012, the District provided incentive funding for a pilot program to demonstrate clean laser-light shows as an alternative to pyrotechnics for July 4th celebrations.

Public Benefit Grants Program – The Public Benefit Grant Program is another recent addition to the District’s incentive programs that provides funding to Valley cities, counties, and other public agencies for a wide variety of clean-air, public-benefit projects. Eligible applicants are cities, counties, special districts (e.g. water districts and irrigation districts), and public educational institutions (e.g. school districts, community colleges, and state universities) located within the Valley.

REduce MOtor Vehicle Emissions (REMOVE) – The REMOVE program provides incentives for specific projects that will reduce the Valley’s motor vehicle emissions, including e-mobility (video-telecommunications), bicycle infrastructure, alternative fuel vehicle mechanics training, and public transportation and commuter vanpool subsidies. The program allocates funds to cost-effective projects that have the greatest motor vehicle emissions reductions resulting in long-term impacts on air pollution problems in the Valley. All projects must have a direct air quality benefit in the Valley.

The current incentive priorities are reflected in the 2012-13 District Budget's incentive spending plan and include funding for the following incentives:

Community Incentives

- Drive Clean! Rebate (passenger vehicles)
- PASS Vehicle Repair
- Burn Cleaner (residential woodburning)
- Clean-Green-Yard-Machine (lawn mowers)
- REMOVE (vanpools, bikepaths, etc.)

Goods Movement

- Proposition 1B Heavy Duty Trucks
- Proposition 1B Line-Haul Locomotives
- Rail Yard Switcher Locomotives

Heavy Duty Equipment Programs

- Agricultural Equipment Replacement
- Agricultural Irrigation Pumps
- Truck Voucher and Reuse
- Construction Equipment Replacement
- Refuse Fleet Replacement

Advanced Transportation/Vehicles

- Public Benefit Grants
- Electric Vehicle Strategic Plan

School Bus Replacement and Retrofit

- School Bus Replacement/Retrofit
- Statewide Retrofit Program

Regional Assistance

- Energy Efficiency Partnership
- Greenhouse Gas Mitigation Assistance

Technology Advancement

- Technology Advancement Program
- Zero-Emission Commercial Lawn and Garden

6.4 NEW POTENTIAL INCENTIVE PROGRAMS

The District has successfully launched and expanded incentive programs in the Valley while steadily increasing the scope, accessibility, and efficiency of those programs. The District's incentive programs have been models for other agencies to follow: the State used the District's successful PASS program as a model for its Enhanced Fleet Modernization Program, the South Coast AQMD implemented the District's augmentation of the State's Hybrid Truck and Bus Voucher Incentive Program (HVIP), and the U.S. Department of Agriculture's NRCS used the District's highly successful agricultural equipment replacement program as the model for their own complementary program. The District's commitment to developing new and innovative incentive programs will continue to serve as a shining example for other agencies nationwide.

In addition to funding the existing core incentive programs that have traditionally achieved highly cost-effective emissions reductions (heavy duty tractors, trucks, etc.), the District has evaluated some additional opportunities to expand the portfolio of programs available. As new funding sources and opportunities are identified, the District will continue to look for additional incentive programs and expansions to existing programs.

Table 6-1 Potential New Incentive Programs

<i>Potential New Incentive Measures</i>	Implementation Date
Ongoing Enhancements. Continue to seek additional funding to implement incentive programs and continue to support existing incentive programs for mobile sources, as appropriate.	Ongoing
Kern County Focused Incentives. The District will consider opportunities to target incentive reductions in Kern County to expedite attainment of the 24-hour federal PM2.5 standard.	Ongoing
Charbroilers. Continue to seek additional funding to implement incentive programs and continue to support existing incentive programs for stationary sources such as the CHP and the Burn Cleaner programs, as appropriate.	Ongoing
Internal Combustion Engines. Consider funding new programs to further promote replacement of agricultural internal combustion engines with electric motors, including but not limited to providing additional incentives for the high cost associated with utility line extensions to remove irrigation pump installations.	Ongoing
Lawn Care. Continue to evaluate commercial lawn care technologies through the Cordless Zero-Emission Commercial Lawn and Garden Equipment Demonstration Program; once new technologies are verified as viable for the Valley develop on-going incentive programs to encourage use of these new technologies; consider expanding the Clean Green Yard Machine program to include other eligible types of yard care equipment, including low- or zero-emission equipment.	Ongoing
Energy Efficiency. Continue to foster and incentivize programs, as appropriate, consistent with the District Regional Energy Efficiency Strategy; including but not limited to continued support of the use of state Energy Efficiency and Conservation Block Grant funds, the funding of a pilot program to assess and	Ongoing

<i>Potential New Incentive Measures</i>	Implementation Date
analyze two manufacturing facilities to determine the potential to operate more efficiently, and funding outreach program showing government and service organizations the benefits of “going green”.	
Fireworks. Continue the incentive program for municipal laser-light shows to replace fireworks displays and to seek partners and consider sponsoring shows combining a small amount of fireworks with an otherwise predominantly laser driven show.	Ongoing
Construction Equipment Replacement. Consider providing incentives for construction fleets to replace their heavy-duty off-road equipment sooner than required by the State’s In-Use Off-Road Diesel Vehicle Regulation.	Ongoing
Refuse Vehicle Replacement Program. Consider providing incentives for the replacement of older refuse trucks, with a particular emphasis in Environmental Justice and other vulnerable communities.	Ongoing