



Notice of Funding Availability
Goods Movement Emission Reduction Program
Locomotives
Year 5 - Solicitation

Air Pollution Control Board

Greg Cox	District 1
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The San Diego County Air Pollution Control District (District) is pleased to announce the availability of funds from the State Goods Movement Emission Reduction Program (GMERP). GMERP is a partnership between the State Air Resources Board (CARB) and local agencies (like air districts and seaports) to quickly reduce air pollution emissions and health risk from freight movement along California’s trade corridors. Projects funded under this Program must achieve early or extra emission reductions not otherwise required by law or regulation. At least \$2 million in total GMERP funding is available for all eligible GMERP projects. Refer to the Project Evaluation and Competitive Ranking Section for more information on funding priorities.

APPLICATION INFORMATION

WHO: Owners of diesel-powered freight locomotives with no or minimal emissions control technology (i.e., uncontrolled, or meeting Tier 0 through Tier 2 standards) or existing freight railyards operating in the San Diego/Border trade corridor.

WHAT: These are the project options for **diesel-powered freight locomotive owners** available as part of this solicitation:

1. Switcher (1,006 hp – 2,300 hp) Locomotive Replacement or Retrofit to Tier 4 Engine Standard
2. Medium Horsepower (2,301 hp – 4,000 hp) Locomotive Replacement or Retrofit to Tier 4 Engine Standard
3. Line-Haul (4,001 hp or higher) Locomotive Replacement or Retrofit to Tier 4 Engine Standard
4. Locomotive Emissions Capture and Control System (a.k.a. hood or bonnet) Installation

For complete Program requirements, please refer to the latest Program Guidelines and related supplemental materials listed on the Program website at www.arb.ca.gov/gmbond. or call the Goods Movement Information Line (916) 44-GOODS (444-6637).

HOW: Submit applications online through the County’s online Citizen Access system - <https://publicservices.sandiegocounty.gov/CitizenAccess/Default.aspx> Paper applications, fax, email, and incomplete submittals will not be accepted. Staff at the District will be available to help applicants use the online application system by appointment during the application period. Please contact the District at (858) 586-2600 or cleanairgrants@sdcounty.ca.gov if you have questions about the program, have difficulty with the online application process, or have a project that does not fit into the online application categories. For most cargo handling equipment projects, part or all of the application can be done online through the District’s website, however District staff will need to assist applicants with the submission of certain online data so applicants are asked to contact District staff before applying. Infrastructure projects require a written proposal, cost estimate (quotation), and other information requested by the District.

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Applications and all supporting documentation **must be received online by the District by 5:00 pm on Friday March 27, 2020.**

For general information or questions about the Program, please contact:

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Table 1: Eligible Equipment and Maximum Funding Amounts

Project Type ^x	Maximum Funding Amounts
Switcher (1,006 hp – 2,300 hp) Locomotive Replacement or Retrofit to Tier 4 Engine Standard	75% or \$1,875,000 ^a 75% or \$937,500 ^b
Medium Horsepower (2,301 hp – 4,000 hp) Locomotive Replacement or Retrofit to Tier 4 Engine Standard	75% or \$2,250,000 ^a 75% or \$1,125,000 ^b
Line-Haul (4,001 hp or higher) Locomotive Replacement or Retrofit to Tier 4 Engine Standard	75% or \$2,250,000 ^c 60% or \$1,800,000 ^d 35% or \$1,050,000 ^e 15% or \$450,000 ^f
Locomotive Emissions Capture and Control System (a.k.a. hood or bonnet) Installation	80% or at a cost-effectiveness threshold of 0.10 pounds ^g
Equipment owner must demonstrate compliance with the current requirements of all applicable CARB regulations in order to be eligible for funding ^x If the equipment is banned from California operation instead of scrapped, the funding amount is reduced by 20% ^a Class I, Class II, and Class III Railroads with minimum usage of 20,000 gallons/year ^b Class III Railroads with minimum usage of 10,000 to 19,999 gallons/year ^c 90% to 100% California Operation ^d 75% California Operation ^e 50% California Operation ^f 30% California Operation ^g Cost-effectiveness of at least 0.10 pounds of weighted emissions reduced per State dollar invested	

GENERAL REQUIREMENTS (APPLICABLE TO ALL PROJECT CATEGORIES)

- Project eligibility will be based on the 2015 GMERP Guidelines, and the February 2016 Executive Order G-16-009. These documents can be found at: www.arb.ca.gov/gmbond
- Operation or equivalent locomotive horsepower operation in California for the past 2 years
- Switcher locomotives must operate at least 10% within the San Diego/Border trade corridor
- For switchers and medium horsepower locomotives: at least 50% operation or equivalent locomotive horsepower operation within the four California trade corridors for the past 2 years
- For line haul locomotives: a majority of the minimum percentage operation or equivalent locomotive horsepower operation within the four California trade corridors for the past 2 years

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- Medium horsepower and line haul locomotives must operate in the San Diego/Border trade corridor
- Estimated diesel fuel usage of 20,000 gallons or equivalent per year or greater for Class I or Class II railroads
- Estimated diesel fuel usage of 10,000 gallons or equivalent per year or greater for Class III railroads
- Exclude any Program-funded equipment from the compliance calculations for the 1998 agreement for locomotives operating in the South Coast Air Basin for the duration of the project life (applicable to Union Pacific and BNSF Railway only)
- Certify that there are no outstanding CARB violations or non-compliance with CARB regulations associated with the equipment or the owner

ELIGIBILITY

All Locomotive Replacements or Retrofits to Tier 4 Engine Standard

- Except for line-haul projects, commit to 90% or 100% California-only operation for the duration of the project life; equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner
- Except line-haul projects, commit to at least 50% of operation within the four California trade corridors for duration of the project life
- Switcher locomotives must commit to operate at least 10% within the San Diego/Border trade corridor
- Medium horsepower and line haul locomotives must operate in the San Diego/Border trade corridor
- Commit to a project life of 15 years
- Commit to the funded locomotive using California CARB diesel fuel unless CARB approves an exemption and it is included in the contract between the District and equipment owner
- Scrap the old engine/locomotive, or ban old engine/locomotive from California operation (replacements and retrofits involving engine replacement)
- Install an active GPS device on both the old equipment (if not scrapped) and the new equipment, fund and commit to data collection, and report location data

Line-Haul (4,001 hp or higher) Locomotive Replacement or Retrofit to Tier 4 Engine Standard

- Commit to a minimum percentage of California operation per the appropriate funding level for the duration of the project life. Equipment is permitted to temporarily travel out-of-state for periodic maintenance, if outlined in the contract between the local agency and equipment owner.
- Commit to at least a majority of the percentage California operation being within the four California trade corridors for the duration of the project life.
- As an amendment to the above requirements regarding scrap,
 - Scrap or ban the old (uncontrolled through Tier 1+) engine/locomotive from California operation for (replacements or retrofits involving engine replacement). If upgrading a Tier

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2 engine/locomotive, the Tier 2 equipment may remain in California and a Tier 0 through Tier 1+ engine/locomotive must be scrapped or banned from California operation (replacements and retrofits involving engine replacement)

Locomotive Emissions Capture and Control System (a.k.a. hood or bonnet) Installation

- Commit to 100% operation within the four California trade corridors for the duration of the project life
- Commit to operate at least 10% within the San Diego/Border trade corridor
- Commit to a project life of 10 years
- Document the system is commercially available and achieves an overall capture and control efficiency rate of at least 80% for the removal of NOx and PM
- Demonstrate system performance and efficiency with source testing prior to funding and annually thereafter by capturing emissions from an operating locomotive undergoing diagnostic procedures. Performance measures include: (i) no visible emissions after bonnet is connected to the locomotive (opacity <20%); and (ii) establish overall system efficiency rate is at least 80% using CARB approved methods for flow rate (Methods 1 to 4), NOx (CARB Method 100) and PM (CARB Method 5). Any alternative test methods must be approved by CARB
- Obtain a 10-year manufacturer's warranty (including labor and materials) to repair and/or replace system component(s) as needed to correct any mechanical, electrical or control system equipment or installation problems, which may cause significant loss of capture, treatment efficiency or usability. The manufacturer's warranty may exclude minor items that are subject to normal wear and tear if approved by CARB
- Comply with all local permitting requirements
- Electricity and other operation and maintenance costs are excluded funding components

GENERAL CONTRACT REQUIREMENTS FOR LOCOMOTIVES (APPLICABLE TO ALL PROJECT OPTIONS)

- Equipment owners are required to notify the Air District as soon as possible if anything about the Project changes, as there may be circumstances that cause the Project to become ineligible.
- Selected applicants must sign a contract with the District including project milestone and completion deadlines and commit to the following:
 - Demonstrate that your fleet is in full compliance with all applicable CARB regulations with the submittal of any required documents requested by the District or CARB without utilizing Program-funded equipment until the specified timeframe
 - Equipment inspections at a District's designated time & location
 - Destruction of existing equipment and engine at a District-approved facility. (Existing equipment must be kept in operating condition until it is delivered to the dismantler)
 - Maintaining eligibility for Program funds throughout application evaluation, ranking, and contracting process. This includes correcting any air pollution citations, reporting, repairing, or replacing equipment that has been damaged, destroyed, or stolen, following all requirements in Program Guidelines (page 118)

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- Commit to the project life (contract term) specified with the applicable Program-funded equipment project option
- Adhere to all Program requirements during the project life
- Ownership of the existing equipment shall not change from the time an equipment project application is submitted to invoice payment
- Agree to accept an on-board electronic monitoring unit on Program-funded equipment at any time during project life
- Comply with record-keeping, reporting, and audit requirements
- Properly maintain Program-funded equipment in good operating condition and according to manufacturer's recommendations
- Maintain insurance on the Program-funded equipment
- Demonstrate proof of equipment warranty as noted above in the Eligibility Section
- Correct outstanding CARB equipment violations associated with the owner's entire fleet of equipment
- Program-funded projects must be purchased and operational (i.e. post-inspected, except scrappage) prior to any regulatory requirement, if applicable
- Agree and acknowledge that the District may release the information the application contains to third parties if required by state and federal public records laws
- Program funding shall only be used to pay down the capital cost of the new equipment
- Any tax obligation associated with the funding award is the responsibility of the equipment owner (grantee). Equipment owners receiving funding may be issued a 1099-G form by the District for the awarded amount, if required
- Any other program provisions described in the Program Guidelines

MODIFYING AN APPLICATION

Equipment owners are limited in what they can change in the application, as changes will affect a project's competitive ranking. Equipment owners are encouraged to select the option that best suits their company as changes may not be possible at a later date. For program-funded projects, equipment owners are able to select any make/model vehicle, engine, or equipment as long as it meets the required emission level as required in the Program Guidelines. Please note that your funding amount may change.

Equipment owners may change the project option after the solicitation period has closed subject to the following requirements:

- The change must result in a funding amount equal to or less than the amount that was requested in the original application
- The change must result in calculated project cost-effectiveness equal to or greater than the project listed in the original application
- The change must result in the project remaining above the funding line on the ranked list

Equipment owners **cannot** substitute a different existing equipment or change the ownership of the existing equipment identified on the application after the solicitation period has closed.

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The equipment owner may be allowed to re-apply for equipment project funding if a previous application for the same project has been rejected and is no longer being considered by a local agency for funding.

APPLICATION SUBMITTAL REQUIREMENTS

Once a GMERP application for locomotive equipment has been submitted, an equipment owner **cannot** submit a subsequent Carl Moyer Program or GMERP application for the same equipment to any agency. Equipment owners who are found to have submitted multiple applications for the same equipment project and not disclosed any other requested, or received financial incentive may be disqualified from funding for that engine or piece of equipment under this Program. The equipment owner may also be prohibited from submitting future applications to any and all CARB incentive programs, or local agency incentive programs.

EQUIPMENT PROJECT PURCHASE RESTRICTIONS

For all equipment, an equipment owner may pre-order prior to contract execution at the equipment owner's risk. An equipment owner **may not** purchase, receive, install, pay for, or place into operation any engines, equipment, or vehicles, nor may work begin on a project to install electrical infrastructure, until the project contract is fully executed unless permitted in the Program Guidelines (page 104).

Dealers and equipment owners ordering engines, equipment, or vehicles prior to contract execution assume all financial risk, and are in no way assured Program funds.

PAYMENT PROCESS

The District shall expend Program funds through Invoice Payment. Invoice payments provide Program funding to equipment owners on a reimbursement basis.

Award of grant funding is contingent upon the availability of funds from the California Air Resources Board. In the event funds are not available, the District shall have no liability to pay any funds whatsoever or to furnish any other considerations.

Contracting for these projects is expected to occur in the Spring of 2020, with project funding disbursements in 2021 or later. New equipment funded can only be purchased or ordered once the existing equipment has been pre-inspected and the contract signed between the equipment owner and the District. Retirement of existing equipment included in this application, or the replacement equipment being purchased, cannot be used to demonstrate compliance with any applicable CARB regulations.

Invoice Payments

Reimbursement may only occur after the replacement equipment has passed a post-inspection and the District has received from the equipment owner a valid invoice package for the fully operational new engine, vehicle, or piece of equipment. The District may reimburse the equipment owner upon submission of a valid invoice once the following requirements have been met:

- Equipment owner or dealer must deliver the old equipment to a District-approved licensed dismantler within 30 calendar days of receiving the new fully operational equipment

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- The District must verify with the dismantler that the old equipment has been delivered and is in the custody of the dismantler
- The equipment owner shall submit proof of warranty on the replacement equipment
- Equipment owner must submit proof of insurance for the replacement equipment
- Equipment owner must demonstrate compliance with the current requirements of all applicable CARB regulations, and submit a valid compliance certificate for the current year. **Equipment owners cannot utilize replacement equipment and/or retirement of the old equipment under contract for demonstrating compliance with any CARB regulation**
- Equipment owner must submit proof of replacement vehicle payment and a copy of the original invoice from the vendor or dealership. Additional information may be required by the District
- Reimbursement to equipment owners cannot exceed the amount directly paid by the equipment owner

For complete reimbursement payment information, please refer to the latest Program Guidelines and related supplemental materials listed on the Program website at www.arb.ca.gov/gmbond.

PROJECT EVALUATION AND COMPETITIVE RANKING

- Complete applications will be evaluated by the District and posted on a competitive rank list on the District's website to determine grant eligibility, based on availability of funds. Zero-emission projects will be prioritized for funding. For complete information regarding project evaluation and the competitive ranking process, please refer to Chapter IV of the 2015 Program Guidelines found on the CARB Program website at www.arb.ca.gov/gmbond.
- Eligible on-road truck applications, as described in the Trucks Notice of Funding Availability, will receive funding priority over all other project source categories. If available GMERP funds remain after evaluating all eligible on-road truck applications, the remaining applications with non-truck projects will be evaluated. **The District cannot guarantee all eligible projects will be funded.**

ANNUAL REPORTING REQUIREMENTS

Equipment owners shall be responsible for annual reporting to the District for the project life. The equipment owner annual report shall include, but is not limited to:

Switcher, medium horsepower, and line-haul locomotive

- Contact information (owner name, company, address, phone)
- Build number, date, builder, builder model
- Date of equipment installation
- Locomotive type
- Name and location of home railyard
- Annual megawatt-hours of operation, notch profile and fuel consumed since last report
- Representative profile data to determine engine duty cycle
- Certification and documentation of 90% or 100% California-only operation for switchers and medium horsepower locomotives

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- Certification and documentation of percentage of operation in the four California trade corridors
- Certification and documentation of percentage of California operation
- Certification and documentation of percentage of operation in the San Diego / Border trade corridor
- Summary of maintenance performed (including location) and inspections conducted
- GPS data in a usable format
- The percentage of annual travel in each of the four California trade corridors:
 - Bay Area trade corridor
 - Central Valley trade corridor
 - Los Angeles / Inland Empire trade corridor
 - San Diego / Border trade corridor
- Certification that the bond-funded project was used in accordance with the signed contract and that all information submitted is true and accurate
- Other information as requested by CARB or the District

Locomotive emissions capture and control system

- Contact information (owner name, company, address, phone)
- Description of locomotive emissions capture and control system
- Railyard name/identifier
- Date and location of equipment installation
- Total hours the equipment operated while connected to an operating locomotive over the reporting period
- Total number of locomotives connected to the system over the reporting period
- Estimated average locomotive engine size (in horsepower) connected to the system
- Power usage to run the hood and source of power (grid or generator)
- Natural gas usage (if any) for heating selective catalytic reduction duct burner
- Summary of maintenance, source testing and inspections conducted
- Signed certification statement that the bond-funded project was operated in accordance with signed contract and that all information submitted is true and accurate
- Other information as requested by the District or CARB

USEFUL RESOURCES

- CARB Goods Movement Emission Reduction Program:
<http://www.arb.ca.gov/bonds/gmbond/gmbond.htm>
- San Diego County Air Pollution Control District – Grants and Incentives:
<https://www.sandiegocounty.gov/content/sdc/apcd/en/grants-and-incentives/>
- Map of four major CA trade corridors:
<https://www.arb.ca.gov/bonds/gmbond/docs/gmtradecorridors.jpg>

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DISTRICT SPECIFIC INFORMATION

Program funding plus other funding sources cannot exceed eligible cost of project or any required caps dictated by CARB via advisory or within the Program Guidelines.

Geographic Operations

Both the old and new switcher locomotives must commit to operate **at least 10%** within the San Diego/Border trade corridor. Medium horsepower and line haul locomotives must operate in the San Diego/Border trade corridor.

Locomotive emissions capture and control system must operate **at least 10%** within the San Diego/Border trade corridor.

Please note that other local air Districts in the state may have specific requirements or eligibility restrictions for projects applying for funding through their agency.

