

Goods Movement Program Heavy-Duty Truck Projects Year 5 Program - Fact Sheet

The Proposition 1B: Goods Movement Emission Reduction Program (GMP, Program) is a partnership between the California Air Resources Board (ARB) and local agencies to quickly reduce diesel emissions and health risk from freight movement along California trade corridors. Projects funded under this Program must achieve early or extra emission reductions not otherwise required by law or regulation. The Bay Area Air Quality Management District (Air District) will solicit projects during 2017-2018 for the Year 5 Program.

When will applications be available?

The Air District will accept applications for truck replacement, engine repower, charging & fueling infrastructure and truck stop electrification during the 4th solicitation period **through Friday**, **January 26**, **2018**.

How can I apply?

Except for truck stop electrification, apply for all truck projects **online** on the Air District's website at www.baaqmd.gov/goods. Applications and supporting documentation must be received by the Air District by close-of-business on the last day of the solicitation period (January 26, 2018). If you are unable to apply online or need to submit a proposal for a truck stop electrification project, contact our staff (see below).

What are the Heavy-Duty Truck Project Specifications?

See the Eligible Heavy-Duty Truck Projects table (below) for a summary of the program requirements. Additional information is available on the Air District's website.

How will projects be selected?

Air District staff will evaluate all applications received during the solicitation period and submit a single approved-projects list to ARB for competitive ranking based on estimated emission reductions and cost-effectiveness. Applicants may request a reduced funding amount to increase a proposed project's competitiveness.

How much funding is available and for what types of projects?

In our Air District, about \$48 million is available for Year 5 for all equipment projects. Funding is available to replace diesel-fueled goods movement trucks with trucks having hybrid, natural gas, optional low-NOx natural gas (0.02g/bhp-hr), electric or hydrogen fuel cell engines. 2-for-1 truck replacement or 3-way truck exchange projects are also available. Funding is also available for truck stop electrification and to install infrastructure for electric truck charging and hydrogen truck fueling as part of a truck replacement project.

Where can I find more information?

Visit our website www.baaqmd.gov/goods. If you have questions about the Program or the application process, contact Air District staff at (415) 749-4994 (option 1) or grants@baaqmd.gov.

Useful Resources:

- BAAQMD Goods Movement Program website: www.baaqmd.gov/goods
- ARB Goods Movement Emission Reduction Program website (including to view or print the complete 2015 Program Guidelines): www.arb.ca.gov/gmbond
- ARB Truckstop website (including information about loans and ways to improve fuel efficiency): www.arb.ca.gov/truckstop



Eligible Heavy-Duty Truck Projects (summary of project specifications*)

General Requirements (applicable to <u>all</u> project options)

Existing diesel trucks shall:

- Haul commercial goods, freight or bulk materials more than 50% of the time on CA major trade corridors and travel within the Bay Area air basin no less than 10% of annual operations
- Be equipped with medium-heavy (MHD) or heavy-heavy (HHD) duty diesel engine
- Have class 5 (16,001-19,500 lbs), class 6 (19,501-26,000 lbs), class 7 (26,001-33,000 lbs) or class 8 (33,001+ lbs) manufacturer-rated Gross Vehicle Weight Rating (GVWR)
- Have operated at least 75% of the time in CA over each of the previous two years with a minimum of 20,000 vehicle miles traveled (VMT) in each year (10,000 miles for class 5 or class 6 trucks)
- Have been registered with CA DMV (or CA apportioned) for the past two years (documentation required for application)

Equipment owner shall:

- Comply with all Program requirements during the Project life;
- Sign a legally-binding grant agreement (contract) with the Air District including Project milestones and completion deadlines, commit to a Project life of five (5) years or 500,000 miles for class 7 and class 8 truck Projects, or five (5) years or 300,000 miles for class 5 and class 6 truck Projects (10 years for truck stop electrification);
- Commit to 100% CA-only operation (or 90% CA-only operation if selected at the time of application) and CA DMV registration (or CA-based IRP for 90% option only) for the duration of the Project life; dual plates (except CA/Mexico if required by law) and out-of-state registration are prohibited for existing and replacement trucks after the application is submitted;
- Commit to operate funded equipment more than 50% within the four major CA trade corridors for the duration of the Project life;
- Not order any equipment intended for the Project prior to the Air District's
 posting the approved ranklist on its website showing that specific Project's
 ranking; and not purchase or place into service any equipment for the Project
 until receiving a written start-work letter from the Air District;
- Agree to accept, upon request, an on-board electronic monitoring unit at any time during Project life;
- Properly maintain Project equipment in good operating condition and according to manufacturer's recommendations; obtain a minimum 1-year or 100,000-mile major component engine warranty and maintain comprehensive insurance on replacement equipment for the duration of the Project;
- Agree to equipment inspections and Project performance audits and comply with record-keeping, reporting, and audit requirements of the Program;
- Maintain compliance with CA Truck & Bus Regulation and all other ARB air quality regulations for the entire fleet containing the Project equipment, and
- Submit annual reports to the Air District for the life of the Project and retain Project records for audit for 2 years after the end of the Project life or 3 years after payment, whichever is later.

Ineligible Equipment

- Trucks registered outside CA or dual-plated trucks (except for CA-Mexico dual plates for trucks involved in cross-border trade)
- Trucks equipped with light-heavy duty (LHD) engines
- Salvaged trucks unable to document same-owner CA registration for the prior 24 months before application
- Trucks that change ownership between application submission date and date of final grant award payment for the funded equipment
- Trucks subject to ARB's Public and Utility Fleet Rule
- Trucks subject to ARB's Solid Waste Collection Vehicle Rule



• Trucks subject to ARB's Diesel Cargo Handling Equipment Rule

- Trucks or fleet owners not in compliance with the CA Truck & Bus Regulation or dray-off requirements of the CA Drayage Regulation
- Trucks that have an enclosed cab and cargo area with low sides and tailgate, i.e., pickup trucks.
- Non-diesel fueled trucks.

Modifying an application

Equipment owners may change the equipment project option after the local agency solicitation period has closed if permitted by the Air District and 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 a 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 for that project's solicitation period.

Unless specifically allowed by Program Guidelines, equipment owners cannot substitute Project equipment or change equipment ownership from that identified on the application between the date of application and date of final grant award payment for the funded equipment. Failure to report Project changes in a timely manner may result in project cancellation and imposition of non-performance penalties as applicable (see below).

Truck Replacement Requirements for All Fleets (Option 2)

Partial funding to replace one or two diesel trucks equipped with eligible engine/s with one new (meaning, not previously owned) alternative fuel or advanced technology truck. Project funding is based on the weight class of the existing truck or on the lowest weight class engine duty cycle (assuming class 5, class 6 & 7 trucks have MHD engine and class 8 has HHD**) of the existing or replacement truck/s. Any hybrid or electric engine in the replacement truck must follow CARB Heavy Duty Hybrid Electric Vehicle Certification Procedure.

- Class 7 or class 8 truck with MY 2009 or older engine
- Class 6 truck with MY 1998-2009 engine
- Class 5 truck with MY 2000-2009 engine
- Replacement engines for all projects shall meet or exceed 2010 emissions standards (0.20 g/bhp-hr or cleaner NOx (FEL and CERT values) and 0.01 g/bhp-hr or cleaner PM (CERT values))
- Projects for zero-emissions or hybrid engines may co-fund their GMP project with AB118 and Low Carbon Transportation Program grants
- If the existing truck received a prior Prop 1B/GMP grant to retrofit the engine, the grant award will be reduced by the amount of the prior award.
- The existing truck & engine for all projects shall be scrapped unless trucks with MY 2007-2009 engines are selected for reuse by ARB
- Program-funded equipment shall be installed/purchased and operational by the date in the equipment owner's project contract and prior to a regulatory requirement under applicable provisions of any adopted rule for in-use truck or June 30, 2019 for Class 6 trucks, or December 31, 2018 for Class 5 trucks.

Class 7 or class 8 truck:

- 1. \$200,000 for a new zero emission replacement truck with a MY2016 or newer engine (hydrogen fuel cell or electric)
- 2. \$150,000 for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine (plug-in hybrid)
- 3. \$100,000 for a new optional low-NOx replacement truck with a MY2016 or newer engine (0.02g/bhp-hr or less NOx)
- 4. \$80,000 for a new hybrid replacement truck with a MY2016 or newer engine
- 5. \$65,000 for a new natural gas replacement truck with a MY2016+ engine

Applications for Truck Replacement projects must be made online through the Air District website www.baaqmd.gov/goods (assistance available,

see website for details)



Class 6 truck:

- 1. \$100,000 for a new zero emission replacement truck with a MY2016 or newer engine (hydrogen fuel cell or electric)
- 2. \$65,000 for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine (plug-in hybrid)
- 3. \$50,000 for a new optional low-NOx replacement truck with a MY2016 or newer engine (0.02g/bhp-hr or less NOx)
- 4. \$45,000 for a new hybrid replacement truck with a MY2016 or newer engine
- 5. \$40,000 for a new natural gas replacement truck with a MY2016 or newer engine

Class 5 truck:

- 1. \$80,000 for a new zero emission replacement truck with a MY2016 or newer engine (hydrogen fuel cell or electric)
- 2. \$50,000 for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine (plug-in hybrid)
- 3. \$40,000 for a new optional low-NOx replacement truck with a MY2016 or newer engine (0.02g/bhp-hr or less NOx)
- 4. \$35,000 for a new hybrid replacement truck with a MY2016 or newer engine
- 5. \$25,000 for a new natural gas replacement truck with a MY2016 or newer engine

2-for-1 Truck Replacement:

Replacement of two eligible trucks for one new truck. The funding amount is based on the highest weight classification of the two existing trucks, or the weight classification of the new truck, whichever is lower.

**Funding amounts assume that the replacement truck GVWR and engine duty cycle will be the same as the existing (old) truck. Exceptions to the assumed "weight-class plus engine duty-cycle" requirement for truck replacements may be considered if the exception is approved by the Air District prior to equipment order; funding will be based on the amount assigned to the lowest weight class. Class 7 & 8 trucks can be replaced with either weight class if both old & replacement trucks have an HHD engine. A class 7 truck can be replaced with a class 6 truck or a class 6 truck can be replaced with a class 5 truck as long as both trucks have a MHD engine.

Three-Way Truck Exchange for All Fleets (Option 3)

Replace an eligible truck having MY 2007-2009 engine (with an original equipment manufacturer (OEM) filter or a level 3 PM retrofit) (Truck A) with an advanced technology truck (Truck C) and scrap a MY2006 or older eligible truck (Truck B).

How it works:

Truck A: Heavy duty diesel truck with MY2007-2009 engine and OEM or Level 3 PM retrofit

Truck B: Heavy duty diesel truck with MY2006 or older engine that is compliant with the CA Truck and Bus Regulation

Truck C: Heavy duty truck (advanced technology) is certified/verified (as applicable) by ARB

- 1. Replace Truck A with Truck C
- 2. Scrap Truck B and replace Truck B with Truck A

Funding Options (maximum grant award amounts):

Class 8 or class 7 truck:

- 1. \$200,000 for a new zero emission replacement truck with a MY2016+ engine
- 2. \$150,000 for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine
- 3. \$100,000 for a new optional low-NOx replacement truck with a MY2016 or newer engine (0.02g/bhp-hr or less NOx)
- 4. \$80,000 for a new hybrid replacement truck with a MY2016 or newer engine.
- 5. \$65,000 for a new natural gas replacement truck with a MY2016+ engine.

3-way truck exchange project applications require assistance to enter in the online application system – contact our staff



Class 6 truck:

- 1. \$100,000 for a new zero emission replacement truck with a MY2016+ engine
- 2. \$65,000 for a new hybrid replacement truck capable of zero emission miles with a MY2015 or newer engine
- 3. \$50,000 for a new optional low-NOx replacement truck with a MY2016 or newer engine (0.02g/bhp-hr or less NOx)
- 4. \$45,000 for a new hybrid replacement truck with a MY2016 or newer engine
- 5. 40,000 for a new natural gas replacement truck with a MY2016 or newer engine

Class 5 truck:

- 1. \$80,000 for a new zero emission replacement truck with a MY2016 or newer engine (hydrogen fuel cell or electric)
- 2. \$50,000 for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine (plug-in hybrid)
- 3. \$40,000 for a new optional low-NOx replacement truck with a MY2016 or newer engine (0.02g/bhp-hr or less NOx)
- 4. \$35,000 for a new hybrid replacement truck with a MY2016 or newer engine
- 5. \$25,000 for a new natural gas replacement truck with a MY2016+ engine

Requirements:

- Truck C must be the same weight class as Truck A (unless allowed as described in the General Requirements section on page A-3)
- Truck A and B must move goods for the majority of time
- Truck B may be any eligible weight class
- Truck B may operate inside or outside of the trade corridor

Truck C shall be purchased and operational (post inspection completed, except scrappage) prior to a regulatory requirement for that technology or level of emissions control under applicable provisions of any adopted rule for in-use trucks. ARB will post and update information on the Program website describing deadlines for the applicable project option.

Program-funded equipment shall be purchased and operational by the date in the equipment owner's project contract and prior to a regulatory requirement under applicable provisions of any adopted rule for in-use truck or June 30, 2019 for Class 6 trucks, or December 31, 2018 for Class 5 trucks.

In addition to the Requirements listed above, the original owner of Truck A and new owner of new Truck C shall:

- Transfer ownership (if applicable) of Truck A to the owner of old Truck B and new owner of Truck A must sign a contract with the Air District
- For Truck C, commit to a project life of 5 years or 500,000 miles for a class 7 or class 8 (300,000 miles for a class 5 or 6 truck), whichever comes first
- Commit to 90% or 100% CA-only operation selected at the time of application

Electric Charging or Hydrogen Fueling Infrastructure

Charging/fueling project applications apply online on the same application as required truck replacements, contact staff for assistance with the proposal

Partial funding up to the lower of 50% or \$30,000 to purchase electric charging or hydrogen (fuel cell) fueling infrastructure for one vehicle. Funding for the infrastructure is in addition to the funding to replace one (1) eligible truck described in Options 2 & 3. This funding option is only available if the equipment owner replaces a minimum of one (1) truck through the Program.

In addition to the General Requirements listed previously, equipment owner shall:

- Replace at least one diesel truck with one electric or fuel cell truck
- Meet all requirements for project Option 2 or Option 3 Commit to a 5 year project life.
- For electric vehicles install a battery charger that is capable of 480V/250 amps/3-Phase power (may be capable of other voltages in addition to meeting the 480V requirement).



• Document proof of warranty for a minimum of three years

• Comply with all legal, permitting and planning requirements for the installation of the infrastructure at the facility

Truck Stop Electrification

Partial funding up to 50% of eligible costs or a level commensurate with a formula*** to install truck electrification infrastructure at a truck stop, distribution center or similar facility where heavy-duty diesel trucks congregate within the four major CA trade corridors.

Application for Truck Stop Electrification requires submission of a full proposal to the Air District – contact our staff to apply Eligible costs include purchase and installation of electrical infrastructure or equipment to enable heating, cooling and the use of cab power for parked trucks at the facility. Ineligible costs include on-board auxiliary power units and other equipment installed on trucks, equipment and services unrelated to heating and cooling (e.g., telephone, Internet, television, etc.), electricity charges, and operation and maintenance costs.

Total reimbursement of eligible costs shall be based on demonstrated use over the first year of operation. If the actual usage for the first year of operation is less than the projected usage, the maximum allowable reimbursement payment shall be prorated based on the following formula:

Maximum Reimbursement (\$) = $\left(\text{Original Maximum Reimbursement ($) X } \frac{\text{Actual Usage (# of hours)}}{\text{Projected Usage (# of hours)}} \right)$

In addition to the General Requirements listed previously, equipment owner shall:

- Commit to a 10-year project life. The contract will be signed with the Air District
- Comply with all legal, permitting and planning requirements for installation at the facility

***the cost-effectiveness formula to determine maximum eligible cost reimbursement is 0.10 pounds of weighted emissions reduced per State dollar invested; proposed projects must meet or exceed this formula and will be evaluated using this formula, and amount of grant may be adjusted accordingly.

Payments

Payment of grant awards is made on a reimbursement basis, after:

- 1. The receipt of invoices and documentation required by the Program Guidelines
- 2. Satisfactory post-inspection of replacement equipment, and
- 3. Satisfactory post-inspection and surrender of old/existing equipment to an Air District-Certified Dismantler or designated facility if the equipment is selected for reuse by ARB, in accordance with the Program Guidelines.

Interim payments may be considered for large projects and payments may be made to vendors or dealers if requested by the Grantee and if allowed by the Program Guidelines.

To Maintain Eligibility at All Times

Owners must ensure their Project equipment meets the following at all times:

- Legal ownership matches the application materials,
- Is in legal operation, moves trade goods the majority of the time, and the old truck travels in CA at least 75% of the time and based on contract requirements, the replacement truck will travel in CA at least 90% of the time,
- Conforms with minimum operational requirements listed in the solicitation and application materials and in the Program Guidelines,
- Maintains active CA base-plated registration (or CA IRP if 90% CA usage option is selected at the time of application) and is not dual-plated unless involved in US-Mexico cross-border trade that requires dual-plating (CA & Mexico only), Planned non-operational (PNO) registration is not permitted,
- Equipment and owner's fleet maintain and can document compliance with all ARB (air quality) regulations [Note that program-funded equipment cannot be



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	used towards compliance for the timeframe specified by ARB (see schedule at www.arb.ca.gov/gmbond)]. 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.
Non-Performance & Remedies	Non-performance occurs when the conditions of a ranked or approved Project change in violation of Program requirements. Remedies vary based on the stage of project completion and include but are not limited to: Cancellation of the Project or termination of any executed grant agreement Banning an equipment owner or a specific piece of equipment from participating in incentive programs administered by the Air District Repayment of all or a portion of the grant award paid for the Project Other fiscal penalties based on the severity of the non-performance

^{*} This is a summary of the program requirements and not a complete list of requirements.

