Goods Movement Program
Heavy-Duty Truck Projects
Year 5/6 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 2021-2022 for the Year 5/6 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 5th solicitation period **through Thursday, October 28, 2021.**

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 11:59 pm PDT on the last day of the solicitation period (October 28, 2021).** 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 $10 million is available for Year 5/6 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): https://ww2.arb.ca.gov/our-work/programs/proposition-1b-goods-movement-emission-reduction-program
- ARB Truckstop website (including information about loans and ways to improve fuel efficiency): www.arb.ca.gov/truckstop

APPENDIX A Heavy Duty Diesel Trucks

A. Equipment Project Specifications

Eligible Equipment	Heavy duty diesel trucks used to move goods (a majority of the time) for the past 2 years, with an original manufacturer's gross vehicle weight rating (GVWR) of 16,001 lbs or greater listed on the application and verified at pre-inspection. Trucks that are salvaged vehicles will be eligible if a minimum of 24 months of ownership and operation can be verified.
	
	Equipment owner must demonstrate:
	• Fleet compliance with the Statewide Truck and Bus Rule.
	• California operation:
	  ○ At least 75% operation within California for the past 2 years.
	  ○ Annual vehicle miles traveled (VMT) in California each year for the past 2 years:
	  ▪ At least 20,000 miles for Class 8 trucks (33,001 lbs GVWR or greater).
	  ▪ At least 20,000 miles for Class 7 trucks (26,001 - 33,000 lbs GVWR).
	  ▪ At least 10,000 miles for Class 6 trucks (19,501 - 26,000 lbs GVWR).
	  ▪ At least 10,000 miles for Class 5 trucks (16,001 - 19,500 lbs GVWR).
	• California registration:
	  ○ Current registration and prior registration for the past 2 years[1]. Eligible registration types include:
	  ▪ California base-plated registration, OR
	  ▪ California International Registration Plan (California IRP), OR
	  ▪ Dual-plated registration (California based-plated/California IRP and Mexico only) for trucks carrying goods across the California-Mexico border, as they are required to be dual-plated.

	[1]Note: The past 2 years means the current year (1-12 months prior to application date) and prior year (13-24 months prior to application date).
Ineligible 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 not in compliance with the Statewide Truck and Bus Rule and the Drayage Truck Regulation including Dray-Off. • Trucks registered outside the State of California, including dual-plated registration, except for trucks that carry goods across the California-Mexico border, as they are required to be dual-plated, as described above. • Trucks that are a salvage vehicle (see Chapter I, Table I.4) for which a minimum of 24 months of ownership and operation cannot be verified. • Trucks constructed from a glider kit, unless allowed by the local agency for an old, existing truck to be replaced. Glider kit trucks may not be repowered or utilized as a replacement truck. • Repowered trucks when used as a replacement truck. • Trucks that have an enclosed cab and a cargo area with low sides and a tailgate, i.e., pickup trucks.

Heavy Duty Diesel Trucks (cont.)

General Requirements Applicable to All Truck and Truck Stop Electrification Infrastructure Project Options	Equipment owner shall: • Commit to the project life specified with the applicable equipment project option. • Sign a legally binding contract with the local agency including project milestones and completion deadlines. • Demonstrate proof of equipment warranty on the Program-funded equipment. For the duration of the project life, the equipment owner shall: • Adhere to all Program requirements. • Agree to equipment inspections. • Comply with record keeping, reporting, and Program review or fiscal audit requirements. • Properly maintain new or upgraded equipment in good operating condition and according to manufacturer's recommendations.
General Requirements Applicable to All Truck Project Options	The equipment owner shall: • Certify that there are no outstanding ARB violations or non-compliance with ARB regulations associated with the equipment or the owner and provide a copy of the ARB compliance certificate from TRUCRS. • Maintain fleet compliance with the Statewide Truck and Bus Rule without utilizing Program-funded equipment until the specified timeframe. ARB will post and update information on the Program website describing operational deadlines and when the Program-funded vehicle will become eligible to be included in the equipment owner's fleet compliance strategy for the applicable project option. For the duration of the project life, the equipment owner shall: • Commit to move goods a majority of the time. • Maintain California base-plated registration or California IRP, except as described in Eligible Equipment previously listed including no out-of-state and non-California IRP registration. • Commit to 100% California-only operation (or 90% California operation as selected by the equipment owner). • Commit to at least 50% of travel within the four California trade corridors. • Agree to accept an on-board electronic monitoring device at any time. • Maintain collision/comprehensive insurance on the replacement truck for replacement projects.
General Requirements Applicable to All Engines for Repower, or Replacement Project Options	Program requirements for **engines** for repower or replacement projects must be certified/verified/approved (as applicable) by an ARB Executive Order or ARB Approval Letter for on-road use with the following: • Alternative fuel engines must meet the 2010 emissions level of 0.20 grams per brake-horsepower hour (g/bhp-hr) or less NOx (FEL and CERT values) and 0.01 g/bhp-hr or less PM (CERT value). • Hybrid and zero emission engines must be 2016 or newer and certified/verified/approved (as applicable) by ARB. • Low NOx-Natural Gas engines must meet the optional low NOx standard of 0.02 g/bhp-hr or less NOx and be certified/verified (as applicable) by ARB. • Class 8 truck - intended service of Heavy Heavy Duty (HHD) for diesel engines or Heavy Duty Otto (HDO) for applicable alternative fuel vehicles. • Class 7 truck - intended service of Medium Heavy Duty (MHD) or HHD for diesel engines or HDO for applicable alternative fuel vehicles. • Class 5 and 6 trucks - intended service of MHD for diesel engines or HDO for applicable alternative fuel vehicles. • Class 5-8 trucks - all heavy duty hybrid or electric vehicles shall follow ARB's Heavy Duty Hybrid Electric Vehicle Certification Procedure.

Heavy Duty Diesel Trucks (cont.)

General Requirements Applicable to All Truck Replacement Project Options	Program requirements for trucks purchased for replacement projects must meet the following:
	• Original manufacturer's GVWR:
	  ○ Class 8 (33,001 lbs or greater).
	  ○ Class 7 (26,001 - 33,000 lbs).
	  ○ Class 6 (19,501 - 26,000 lbs).
	  ○ Class 5 (10,001 – 19,500 lbs).
	• The existing truck must have a MHD or HHD engine.
	• Same weight classification range (Class 8, Class 7, Class 6, or Class 5) and configuration (HHD or MHD) as the existing truck, except under the following conditions:
	  ○ Replacement of 2 eligible trucks for 1 new truck under Option (2):
	  ▪ 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 less.
	  ○ Replacement required by the equipment owner in order to meet a vocational need, as approved by the local agency
	  ▪ The funding amount is based on the weight classification of the existing or new truck, whichever is less.
	  ○ Replacement of a Class 7 truck with a Class 8 truck, or a Class 8 truck with a Class 7 truck, as long as both trucks have a HHD engine.
	  ▪ The funding amount is based on the weight classification of the existing or new truck, whichever is less.
	  ○ Replacement of a Class 7 truck with a Class 6 truck or a Class 6 truck with a Class 5 truck as long as both trucks have a MHD engine.
	  ▪ The funding amount is based on the weight classification of the existing or new truck, whichever is less.
	  ○ ARB will post information on the program website on applicable project options.
	• Original equipment manufacturer engine installed in a chassis of the same model year, make, and configuration as was originally provided from the truck manufacturer when the chassis and engine were both new.

Modifying an Application (applicable to truck projects only)	Equipment owners may change the equipment project option (replacement, repower or three-way truck transaction) or lease-to-own program participation after the local agency solicitation period has closed if permitted by the local agency 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. Notes: Unless specifically allowed in these Guidelines, equipment owners cannot substitute a different vehicle or change the ownership of the existing vehicle identified on the application after the local agency solicitation period has closed.

Heavy Duty Diesel Trucks (cont.)

General Notes Applicable to Advanced Technology Truck Options	The following notes apply to advanced technology truck project options: 1. A zero emission truck is defined as a vehicle that emits no criteria pollutant, toxic or greenhouse gas emissions at the tailpipe. 2. A hybrid zero emission mile truck is defined as a hybrid vehicle capable of zero emission miles. 3. A hybrid truck is defined as a vehicle with an electric drive system powered by an on-board generator and eligible for funding by AQIP.
Option (1) Repower Funding Options for Small Fleets Only	Partial funding (see options below) to repower a truck equipped with an eligible heavy duty diesel engine with a new MY2016 or newer engine that **meets 2010 emissions.** Eligible projects include: • Class 8 or Class 7 truck with a MY2009 or older engine. • Class 6 truck with a MY1998-2009 engine. 1. $20,000/truck to repower a Class 8 or Class 7 truck. 2. $10.000/truck to repower a Class 6 truck.
Requirements	Program-funded engine shall be installed and operational (post-inspection completed, except scrappage) by the date in the equipment owner's project contract and prior to a regulatory requirement for that technology or level of emissions control under applicable provisions of any adopted rule for in-use trucks for Class 8 and 7 trucks and June 30, 2019 for Class 6 trucks. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 500,000 miles for a Class 8 or Class 7 truck, whichever comes first. • Commit to a project life of 5 years or 300,000 miles for a Class 6 truck, whichever comes first. • Scrap the old engine. • Provide a copy of ARB Executive Order documenting that the new engine meets MY2010 emissions or an ARB Approval Letter (as applicable).
Option (2) Replacement Funding Options for All Fleets	Partial funding (see options below) to replace 1 or 2 truck(s) equipped with an eligible heavy duty diesel engine(s). Funding amounts are based on the same weight classification range (Class 8, Class 7, Class 6, or Class 5) as the existing truck, except as described in the "General Requirements Applicable to All Trucks Replacement Project Options" section above. Eligible projects include: • Class 8 or Class 7 truck(s) with a MY2009 or older engine. • Class 6 truck(s) with a MY1998-2009 engine. • Class 5 truck(s) with a MY 2000-2009 engine. Class 8 or Class 7 truck: 1. $200,000/truck for a new zero emission replacement truck with a MY2016 or newer engine. 2. $150,000/truck for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine. 3. $100,000/truck for a new optional low-NOx-natural gas replacement truck with a MY2016 or newer engine (0.02 g/bhp-hr or less NOx). 4. $80,000/truck for a new hybrid replacement truck with a MY2016 or newer engine. $65,000/truck for a new natural gas replacement truck with a MY2016 or newer engine.

Heavy Duty Diesel Trucks (cont.)

Option (2) Replacement Funding Options for All Fleets (cont.)	Class 6 truck: 1. $100,000/truck for a new zero emission replacement truck with a MY2016 or newer engine. 2. $65,000/truck for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine. 3. $50,000/truck for a new optional low-NOx-natural gas replacement truck with a MY2016 or newer engine (0.02 g/bhp-hr or less NOx). 4. $45,000/truck for a new hybrid replacement truck with a MY2016 or newer engine 5. $40,000/truck for a new natural gas replacement truck with a MY2016 or newer engine. Class 5: 1. $80,000/truck for a new zero emission replacement truck with a MY2016 or newer engine. 2. $50,000/truck for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine. 3. $40,000/truck for a new optional low NOx-natural gas replacement truck with a MY2016 or newer engine (0.02 g/bhp-hr or less NOx). 4. $35,000/truck for a new hybrid replacement truck with a MY2016 or newer engine. 5. $25,000/truck for a new natural gas replacement truck with a MY2016 or newer engine. See general notes/requirements sections for further information on technology specific definitions and additional funding opportunities for advanced technologies.
Requirements	Program-funded equipment shall be installed/purchased and operational (post-inspection completed, except scrappage) by the date in the equipment owner's project contract and prior to a regulatory requirement for that technology or level of emissions control under applicable provisions of any adopted rule for in-use trucks or June 30, 2019 for Class 6 trucks, or December 31, 2018 for Class 5 trucks. In addition to the General Requirements listed previously, equipment owner shall: • Commit to a project life of 5 years or 500,000 miles for a Class 8 or Class 7 truck, whichever comes first. • Commit to a project life of 5 years or 300,000 miles for a Class 6 or Class 5 truck, whichever comes first. • Scrap the old truck including the engine (replacement projects with a MY2006 or older engine). • Provide a copy of ARB Executive Order or ARB Approval Letter (as applicable) documenting that the new equipment is certified/verified/approved (as applicable) by ARB. Replacement projects with MY2007-2009 engines may go through an ARB approved reuse program rather than be scrapped. If reused, an older MY engine truck would be scrapped.

Heavy Duty Diesel Trucks (cont.)

Option (3) Three-Way Truck Transaction for All Fleets	1. Replace an eligible truck that has a MY2007-2009 engine (with an original equipment manufacturer (OEM) filter or a Level 3 PM retrofit) (Truck A) with an advanced technology truck (Truck C) with an engine that is certified/verified/approved (as applicable) by ARB. 2. Scrap a diesel truck with a MY2006 or older engine (Truck B) and replace with Truck A. Truck A: Heavy duty diesel truck with MY2007-2009 engine and a OEM or Level 3 PM retrofit. Truck B: Heavy duty diesel truck with MY2006 or older engine that has demonstrated compliance with the Statewide Truck and Bus Rule. Truck C: Heavy duty truck (advanced technology) that is certified/verified/approved (as applicable) by ARB. Notes: • Truck C must be the same class as Truck A (unless allowed as described in the General Requirements section on page A-3). • Truck B may be Class 8, Class 7, Class 6, or Class 5. • Truck A shall be equipped with an operational diesel particulate filter (OEM filter or installed Level 3 PM retrofit). • Truck A and Truck B must move goods for the majority of time. • Truck B may operate inside or outside of the trade corridor.
Funding Options	Class 8 or Class 7 truck: 1. $200,000/truck for a new zero emission replacement truck with a MY2016 or newer engine. 2. $150,000/truck for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine. 3. $100,000/truck for a new optional low-NOx-natural gas replacement truck with a MY2016 or newer engine (0.02 g/bhp-hr or less NOx). 4. $80,000/truck for a new hybrid replacement truck with a MY2016 or newer engine. 5. $65,000/truck for a new natural gas replacement truck with a MY2016 or newer engine. Class 6 truck: 1. $100,000/truck for a new zero emission replacement truck with a MY2016 or newer engine. 2. $65,000/truck for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine. 3. $50,000/truck for a new optional low NOx-natural gas replacement truck with a MY2016 or newer engine (0.02 g/bhp-hr or less NOx). 4. $45,000/truck for a new hybrid replacement truck with a MY2016 or newer engine. 5. $40,000/truck for a new natural gas replacement truck with a MY2016 or newer engine.

Heavy Duty Diesel Trucks (cont.)

Funding Options (cont.)	Class 5 truck: 1. $80,000/truck for a new zero emission replacement truck with a MY2016 or newer engine. 2. $50,000/truck for a new hybrid replacement truck capable of zero emission miles with a MY2016 or newer engine. 3. $40,000/truck for a new optional low NOx-natural gas replacement truck with a MY2016 or newer engine (0.02 g/bhp-hr or less NOx). 4. $35,000/truck for a new hybrid replacement truck with a MY2016 or newer engine. 5. $25,000/truck for a new natural gas replacement truck with a MY2016 or newer engine.
Requirements	Note: See general notes section for further information on technology specific definitions and additional funding opportunities for advanced technologies. Truck C shall be purchased and operational (post-inspection completed, except scrappage) by the date in the equipment owner's project contract and prior to a regulatory requirement for that technology or level of emissions control under applicable provisions of any adopted rule for in-use trucks, or June 30, 2019 for Class 6 trucks, or December 31, 2018 for Class 5 trucks.. In addition to the applicable General Requirements listed previously, 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. • Commit to a project life of 5 years or 500,000 miles for a Class 8 or Class 7 truck, whichever comes first, on Truck C. • Commit to a project life of 5 years or 300,000 miles for a Class 6 or Class 5 truck, whichever comes first, on Truck C. • Commit to 90% or 100% California-only operation for the duration of the project life. • Provide a copy of ARB Executive Order or ARB Approval Letter documenting that the new truck engine in Truck C is certified/verified/approved by ARB. In addition to the applicable General Requirements listed previously, the original owner of old Truck B must scrap Truck B.

Heavy Duty Diesel Trucks (cont.)

Option (4) Truck Stop Electrification Infrastructure	Truck stops within the four California trade corridors where heavy duty diesel trucks congregate.
Funding Option	Landside truck electrification infrastructure to reduce diesel engine idling and use of diesel-fueled internal combustion auxiliary power systems may be funded at the lower of 50% of eligible project costs or a level commensurate with a cost-effectiveness of 0.10 pounds of weighted emissions reduced per State dollar invested. Projects shall be eligible to compete for funding only if the cost-effectiveness is equal to or greater than 0.10 pounds of weighted emissions reduced per State dollar invested. 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 truck stops. 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 pro-rated based on the following formula: $\text{Maximum Reimbursement (\$)} = \left(\text{Original Maximum Reimbursement (\$)} \times \frac{\text{Actual Usage (\# of hours)}}{\text{Projected Usage (\# of hours)}}\right)$ 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 costs; and operation and maintenance costs.
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Commit to 10 years of operation. • Comply with all local permitting requirements.

Heavy Duty Diesel Trucks (cont.)

Option (5) Electric Charging Stations or Hydrogen Fueling Units	Partial funding of up to the lower of 50% or $30,000 for the purchase of electric charging or hydrogen fueling units for one vehicle. Funding is in addition to the funding for the replacement of 1 heavy duty truck; see Options 2 and 3 for eligibility, funding options, and requirements for the truck replacement. This funding option is only available if the equipment owner replaces a minimum of one vehicle through the Program (Options 2 and 3).
Requirements	In addition to the General Requirements listed previously, equipment owner shall: • Replace a minimum of one electric or fuel cell truck (Option 2 or 3). • Meet all requirements for project Option 2 or 3. • Demonstrate proof of equipment warranty of at least 3 years. • Comply with all local permitting requirements. • 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).
Project Cost Assumptions	• Option (1): Total cost of a repower project is expected to be ~$80,000 for a Class 7 or a Class 8 truck and ~$40,000 for a class 6 truck • Options (2) & (3): Total cost for an advanced technology vehicle is expected to be ~$80,000 for a Class 5 hybrid truck to ~$400,000 for a Class 8 zero emission truck. • Option (4): Total cost for truck stops is $6,000-$18,000/parking space. • Option (5): Total cost for an electric charging unit is $10,000-$60,000/unit depending on the location of the equipment. Total cost for a hydrogen fueling unit is $350,000 to $500,000 depending on location.