



Incentive Programs for Zero-Emission TRUs

Summary

Region	Program	Incentive
Nationwide	Federal Diesel Emissions Reduction Program (DERA)	<ul style="list-style-type: none"> ▪ 45% reimbursement of new all-electric TRUs and trailers
State of California	California Clean Off-Road Equipment Incentive Program (CORE)	<ul style="list-style-type: none"> ▪ \$65,000 reimbursement of new all-electric TRUs ▪ Plus \$3,000 per charging plug ▪ 10% additional incentive for equipment domiciled in disadvantaged communities
State of California	California Carl Moyer Memorial Air Quality Standards Attainment Program (CMP)	<ul style="list-style-type: none"> ▪ 50% reimbursement of new all-electric TRUs and trailers





Application and Award Process

eNow manages customer's incentive voucher applications and annual program documentation requirements in close association with customer. This includes:

- State and Federal program research and monitoring
- Communications with program managers
- Program applications: completion, submission, award monitoring
- eTRU system performance monitoring and recording
- Preparation and submission of program documentation



Diesel Emissions Reduction Program (DERA)

Summary: DERA was created under the Energy Policy Act of 2005. **Current DERA rules provide for a 45% reimbursement of new all-electric TRUs and trailers** on a competitive application basis and require an older unit to be decommissioned for [each new purchase](#). [DERA is a](#) nationwide program.

Details: Created under the Energy Policy Act of 2005 (PDF) (551 pp, 3.16 MB, August 2005, About PDF). This act gave EPA new grant and loan authority for promoting diesel emission reductions and authorized appropriations to the Agency of up to \$200 million per year for FY2007 [through FY2011](#). [Congress appropriated funds](#) for the first time under this program in FY2008. The American Recovery and Reinvestment Act of 2009 (ARRA) provided \$300 million in new funding for national and state programs for the implementation of verified and certified diesel emission [reduction technologies](#). [Recovery Act funding](#) allowed for the implementation [of many](#) additional projects. The Diesel Emissions Reduction Act of 2010 (PDF)(7 pp, 133 K, January 2011, About PDF) reauthorized DERA grants to eligible entities for projects that reduce emissions from existing diesel engines. The bill authorizes up to \$100 million annually for FY2012 through FY2016 and allows for new funding mechanisms, including rebates. Through FY2020, Congress continued to appropriate funding for DERA after authorization expired. Title II of Division D of the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), enacted December 17, 2019, appropriated \$87.0 million for DERA for FY2020, the same as the FY2019 enacted appropriations (P.L. 116-6). Of note, the 2016 Volkswagen “defeat device” legal settlement included an option to use some of the \$2.7B settlement funds paid by Volkswagen into a mitigation trust as a voluntary match for DERA state and tribal grants.

Recently: Reauthorizations for the DERA program have been introduced in recent Congresses. In the 116th Congress, S. 747 was introduced on March 12, 2019, and H.R. 1768 was introduced on March 14, 2019. The House passed H.R. 1768 on September 9, 2019. Both bills would reauthorize the DERA program through FY2024. Current DERA rules provide for a 45% reimbursement of new all-electric TRUs and trailers on a competitive application basis and require an older unit to be decommissioned for each new purchase. DERA is a nationwide program.



Clean
Diesel
Grants
(DERA)



California Clean Off-Road Equipment Incentive Program (CORE)

Summary: CORE is a new program, funded from a recurring revenue source, and closely models after a truck voucher program that has been popular and reauthorized each year. **Rules provide for a \$65,000 reimbursement of new all-electric TRUs** (with a 10% additional incentive for equipment domiciled in disadvantaged communities), plus \$3,000 per charging plug. There is no requirement to decommission older units. CORE is specific to equipment that will be used in California for the first three years.

Details: In 2012, Assembly Bill (AB) 1532 (Pérez, Chapter 807), Senate Bill (SB) 535 (De León, Chapter 830), and SB 1018 (Budget and Fiscal Review Committee, Chapter 39) established the Greenhouse Gas Reduction Fund (GGRF) to receive auction proceeds from California's Cap-and-Trade Program and to provide the framework for how the auction proceeds are administered in furtherance of the purposes of AB 32 (Nunez, Chapter 488, 2006). AB 134 (Committee on Budget, Chapter 14, 2017) appropriated \$140 million from the GGRF for demonstrating and deploying advanced technology in freight equipment. Of that appropriation, \$40 million was allocated to CORE, by the Fiscal Year (FY) 2017-18 Funding Plan for Clean Transportation Incentives (FY 2017- 18 Funding Plan, approved by the California Air Resources Board (CARB) on Dec.14,2017.

- CORE, analogous to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), is a new project intended to encourage California fleets to purchase or lease cleaner off-road equipment. It provides a streamlined voucher process by which potential purchasers can receive funding to help offset the higher cost of such equipment. Pursuant to AB 134 and the FY 2017-18 Funding Plan, CORE is currently only applicable to freight equipment powered exclusively by zero-emission technology.
- While the goal of CORE is to help purchasers overcome the incremental-cost barrier of cleaner off-road equipment, the methodologies developed for determining voucher amounts also consider other factors, such as current market penetration and the projected need for incentives. CORE is eligible for a more limited range of technologies than DERA, including only the following; on- and off-road terminal tractors, transport refrigeration units, large forklifts, container handling equipment, airport cargo loaders, wide-body aircraft tugs, railcar movers, and aircraft ground power units.
- Rules provide for a \$65,000 reimbursement of new all-electric TRUs (with a 10% additional incentive for equipment domiciled in disadvantaged communities), plus \$3,000 per charging plug. There is no requirement to decommission older units. CORE is specific to equipment that will be used in California for the first three years.

California Carl Moyer Memorial Air Quality Standards Attainment Program (CMP)

Summary: CMP funding provides approximately \$61 million per year in statewide funding and more in air districts in designated non-attainment areas. CMP works like DERA, in that it is competitively awarded, requires scrappage of an older TRU, but **reimburses up to 50% of the new TRU/Trailer.**

Details: Since 1998, the California Carl Moyer Memorial Air Quality Standards Attainment Program allocated approximately \$1 billion and the Moyer Program continues to provide over \$60 million in grant funding each year to clean up older polluting engines throughout California. CMP funding is provided via two legislative bills, SB 1107 and AB 923. SB 1107 provides approximately \$61 million per year in statewide funding, and AB 923 permits air districts in designated non-attainment areas to collect additional funds in vehicle registration fees to expand the Program.

Recently: The *South Coast Air Quality Management District* used the AB 923 provision to expand the CMP program to \$34 million in 2020 within its district alone. The regulatory, technological and incentives landscape have changed significantly since the creation of the Moyer Program and to address evolving needs, the Legislature has periodically modified the Program to better serve California. Most recently, Senate Bill (SB) 513 (Beall, 2015) has provided new opportunities for the Program to contribute significant emission reductions alongside implemented regulations, advance zero and near-zero technologies, and combine program funds with those of other incentive programs. Carl Moyer works like DERA, in that it is competitively awarded, requires scrappage of an older TRU, but reimburses up to 50% of the new TRU/Trailer.





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