



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

## Goods Movement Program Transportation Refrigeration Unit (TRU) 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 in 2017 for the Year 5 Program.

### **When will applications be available?**

The Air District will accept applications for transportation refrigeration unit (TRU), insulated trailer for grocery cold storage and charging or fueling infrastructure projects during this solicitation period: **Wednesday, March 1 through Friday, June 30, 2017.**

### **How much funding is available for TRU projects?**

ARB approved an allocation of at least \$3 million for the TRU equipment category but if demand is high, the Air District can allocate more funds to the category. In total, the Air District allocation for Year 5 is approximately \$48 million.

### **How will projects be selected?**

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.

### **What types of equipment is eligible for funding?**

Existing trucks or trailers equipped with diesel-fueled TRUs that are used to move commercial freight, bulk or trade goods the majority of the time for the past two (2) years within one of the four major trade corridors of California, including those operating from a port, intermodal rail yard or freight facility, and cold-storage trailers at grocery retail outlets (link to map below).

### **What project types are available?**

Replacing diesel-powered TRU with zero-emissions TRU (e.g., electric, fuel cell), replacing diesel-powered TRUs with cryogenic TRUs, install electric charging infrastructure or install cryogenic refueling infrastructure, and replace an insulated cold storage trailer at grocery stores or retail stores that sell groceries with a zero-emissions trailer & install an electric plug.

### **How can I apply?**

Download and complete the TRU Application Form from our website (see below) and contact Air District staff with any questions. Infrastructure projects require a written proposal and cost estimate (quotation). Applications and all supporting documentation **must be received by the Air District no later than 5:00pm on Friday, June 30, 2017.**

**To Maintain Eligibility at All Times:**

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

- Equipment and owner's fleet maintain and can document compliance with all ARB (air quality) regulations [Note that program-funded equipment cannot be used towards compliance for the timeframe specified by ARB (see schedule at [www.arb.ca.gov/gmbond](http://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.

**Where can I find more information?**

If you have questions or need additional information, please contact Air District staff at [grants@baaqmd.gov](mailto:grants@baaqmd.gov) or 415-749-4994 (option 1).

**Useful Resources:**

- BAAQMD Goods Movement Program website: [www.baaqmd.gov/goods](http://www.baaqmd.gov/goods)
- ARB Goods Movement Program website: <http://www.arb.ca.gov/bonds/gmbond/gmbond.htm>
- Map of four major CA trade corridors: <http://www.arb.ca.gov/bonds/gmbond/docs/gmtradecorridors.jpg>
- ARB TRU regulation: <http://www.arb.ca.gov/diesel/tru/tru.htm>

***Below is a summary of the program requirements from 2017 updates to the 2015 GMP Guidelines and not a complete list of requirements.***



<p><b>Option (2)</b> <b>Electric Power Plug</b></p> <p><b>Requirements</b></p>	<p>Partial funding of up to the lower of 50% or \$3,000 per electric power plug that is compatible with electric powered TRUs (e.g. all-electric, hybrid electric, or electric standby-equipped TRUs) at loading docks or parking areas of freight facilities.</p> <p>Eligible costs include purchase and installation of an electric power plug.</p> <p>Ineligible costs include design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair.</p> <p>In addition to the General Requirements, equipment owner shall:</p> <ul style="list-style-type: none"> <li>• Install an electric plug capable of providing 460V 3 Phase power (may be capable of other voltages in addition to meeting the 460V requirement).</li> <li>• Commit to a project life of 5 years.</li> <li>• Ensure usage of the power plugs.</li> <li>• Comply with all local permitting requirements.</li> </ul>
<p><b>Option (3)</b> <b>Replacement with Cryogenic Transport Refrigerator</b></p> <p><b>Requirements</b></p>	<p>Partial funding of up to the lower of 80% or \$100,000 to replace five (5) existing TRUs with five (5) cryogenic transport refrigerators. Additional cryogenic transport refrigerators may be funded at the lower of 80% or \$20,000 per additional TR.</p> <p>In addition to the General Requirements, equipment owner shall:</p> <ul style="list-style-type: none"> <li>• Commit to a project life of 5 years or 10,000 hours, whichever comes first.</li> <li>• Scrap the old diesel TRU(s).</li> </ul>
<p><b>Option (4)</b> <b>Install Cryogenic Infrastructure and Equipment</b></p> <p><b>Requirements</b></p>	<p>Partial funding of up to the lower of 50% or \$100,000 to install infrastructure and equipment for a cryogenic refrigeration fueling station at a freight facility.</p> <p>Eligible costs include purchase and installation of cryogenic infrastructure or equipment.</p> <p>Ineligible costs include design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair.</p> <p>In addition to the General Requirements, equipment owner shall:</p> <ul style="list-style-type: none"> <li>• Commit to a project life of 5 years.</li> <li>• Ensure usage of the fueling station.</li> <li>• Comply with all local permitting requirements.</li> </ul>

<p><b>Option (5) Insulated Trailer and Electric Power Plug</b></p> <p><b>Requirements</b></p>	<p>Partial funding of up to the lower of 50% or \$40,000 for the purchase of an insulated trailer and one electric power plug.</p> <p>Eligible costs include the insulated trailer and the purchase and installation of an electric power plug.</p> <p>Ineligible costs include design, engineering, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair.</p> <p>In addition to the General Requirements listed previously, equipment owner shall:</p> <ul style="list-style-type: none"> <li>• Commit to a project life of 5 years.</li> <li>• Scrap or destroy the old diesel TRU(s) from the existing trailer.</li> <li>• Purchase an electric-standby capable TR and install it on the new trailer.</li> <li>• Install an electric plug capable of providing 460V 3 Phase power (may be capable of other voltages in addition to meeting the 460V requirement).</li> <li>• Ensure usage of the equipment cold storage at grocery stores or retail stores that sell groceries (i.e. big box retailers) in the four trade corridors. Comply with all local permitting requirements.</li> </ul>
<p><b>Project Cost Assumptions</b></p>	<ul style="list-style-type: none"> <li>• Option (1): Total projected cost of a fuel cell or all electric zero emission TR is expected to be ~\$30,000-\$60,000.</li> <li>• Option (2): Total cost for freight facilities is \$1,500-\$7,000/plug at dock; \$2,500-\$9,000/plug in parking areas; \$500-\$2,000/adaptor for trailers and TRUs.</li> <li>• Option (3): Total cost of a cryogenic transport refrigerator is expected to be ~\$20,000-\$35,000.</li> <li>• Option (4): Total cost of cryogenic fueling infrastructure is \$20,000-\$250,000.</li> <li>• Option (5): Total cost of new trailer and plug is \$70,000-\$90,000.</li> </ul>

***\* This is a summary of the program requirements and not a complete list of requirements.***