



# Notice of Funding Availability

## Goods Movement Emission Reduction Program

### Ships at Berth (Shore Power)

### Year 5 Solicitation 3

Air Pollution Control Board

Greg Cox	District 1
Dianne Jacob	District 2
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Nathan Fletcher	District 4
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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:** Operators of cargo ship berths, cargo ship terminals, or barge-based systems at a seaport located within the San Diego/Border corridor (refer to Useful Resources Section).

**WHAT:** These are the project options for **operators of cargo ship berths, cargo ship terminals, or barge-based systems** available as part of this solicitation:

1. Permanent, grid-based electrical power installation at a cargo ship berth or cargo ship terminal
2. Electricity generating unit installation that provides power at one cargo ship berth or multiple berths
3. Ship emissions capture and control system (a.k.a. hood or bonnet) installation at a cargo ship berth or cargo ship terminal

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

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

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**Table 1: Eligible Equipment and Maximum Funding Amounts**

Project Type	Maximum Funding Amounts
Permanent, grid-based electrical power installation at a cargo ship berth or cargo ship terminal	50% or \$2,500,000 <sup>a</sup> 60% or \$3,500,000 <sup>b</sup>
Electricity generating unit installation that provides power at one cargo ship berth or multiple berths	\$200,000 per megawatt
Ship emissions capture and control system (a.k.a. hood or bonnet) installation at a cargo ship berth or cargo ship terminal	50% or at a cost-effectiveness threshold of 0.10 pounds <sup>c</sup>
<sup>a</sup> Projects with a cost-effectiveness equal or greater than 0.10 pounds of weighted emissions reduced per State dollar invested <sup>b</sup> Projects with a cost-effectiveness equal or greater than 0.20 pounds of weighted emissions reduced per State dollar invested <sup>c</sup> Cost-effectiveness of at least 0.10 pounds of weighted emissions reduced per State dollar invested	

#### **GENERAL REQUIREMENTS (APPLICABLE TO ALL PROJECT CATEGORIES)**

- The equipment must operate at cargo ship berths, cargo ship terminals, or barge-based systems at a seaport located within the San Diego/Border corridor.
- Project eligibility will be based on the 2015 GMERP Guidelines, the May 2016 Executive Order G-16-024, and the September 2015 Supplemental Procedures for Ships at Berth and Cargo Handling Equipment Projects. All of these documents can be found at: [www.arb.ca.gov/gmbond](http://www.arb.ca.gov/gmbond).
- Certify that there are no outstanding CARB violations or non-compliance with CARB regulations associated with the equipment or the owner.
- Ships at-berth projects that are listed as a mitigation measure as part of a final, certified California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) document are not eligible for funding.
- Applicants must provide a project schedule for each berth with project milestone completion date(s), including the key milestone dates marked with a double asterisk (\*\*), as listed below. The schedule shall be based on credible estimates, and there will be an opportunity to update the schedule prior to execution of the equipment project contract.
  - Preliminary design
  - Environmental clearance (if applicable) \*\*
  - Final design

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- Equipment ordering (with delivery dates consistent with timely completion of project milestones)
- Equipment delivery (for all equipment with lead times over 1 month) \*\*
- Power upgrade project (as defined above)
- Execution of purchase orders and/or construction contract(s) \*\*
- Permits.
- Start construction (material and equipment installation) \*\*
- Finish construction (material and equipment installation)
- Commissioning/testing
- Demonstration of a fully operational system (with ship plugged-in)

#### **ELIGIBILITY**

##### **Permanent, grid-based electrical power installation at a cargo ship berth or cargo ship terminal**

- The cargo ship berth or terminal must receive visits **solely** by vessels not subject to the control requirements of CARB's Ships at-Berth Rule in effect as of 2015
- Project shall be eligible to compete for funding only if the cost-effectiveness is equal or greater than 0.10 pounds of weighted emissions reduced per State dollar invested
- Eligible project costs may include design, engineering, equipment necessary to purchase and install infrastructure to supply electrical power, utility construction, and costs associated with increasing the capacity of electrical power to the port
- Ineligible project costs include shipside modifications to accept shore-based electrical power, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, metered costs, insurance, operation, maintenance, and repair
- Commit to a project life of 10 years with at least 10% of its operation within the San Diego/Border trade corridor
- Demonstrate operability with a cargo ship fully powered by shore-based electrical power supplied by the grid-based equipment

##### **Electricity generating unit installation that provides power at one cargo ship berth or multiple berths**

- The cargo ship berth or terminal must receive visits **solely** by vessels not subject to the control requirements of CARB's Ships at-Berth Rule in effect as of 2015
- Only zero emission units (e.g., fuel cell, solar), or natural gas engines equipped with selective catalytic reduction to control NOx emissions are eligible
- Eligible costs may include equipment necessary to generate electrical power and connect the equipment to cargo ships at berth
- Ineligible costs include construction and protection of infrastructure (e.g., natural gas lines) used to supply fuel for non-grid-based electrical generation, shipside modifications to accept electrical power, barge or other acquisition and modification for a portable system, design, engineering,

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consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, utility construction or metered costs, insurance, operation, maintenance, and repair

- Commit to a project life of 5 years with:
  - 100% California operation
  - At least 1,000 hours per year within the San Diego/Border trade corridor
  - At least 10% of its operation within the San Diego/Border trade corridor
- Demonstrate operability with a cargo ship fully powered by shore-based electrical power supplied by the electricity generating unit
- Obtain a 5-year manufacturer's warranty which includes 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 resulting in significant loss of usability. The manufacturer's warranty may exclude minor items that are subject to normal wear and tear if approved by CARB
- Perform source testing to measure emissions from the unit every 1,000 hours of operation, according to the source test requirements contained in CARB's Ships at-Berth Rule

#### **Ship emissions capture and control system (a.k.a. hood or bonnet) installation at a cargo ship berth or cargo ship terminal**

Ship visits that are required to have emissions control under CARB's Ships-at-Berth Rule cannot be used for calculation of the extra emission reductions attributable to the Program grant

- Only units that have CARB-approved capture and treatment efficiency rates for PM and NOx consistent with CARB's Ships at Berth Rule are eligible for funding
- Eligible costs may include purchase and installation of the emission treatment system and ducting, and hoods or bonnets necessary to connect to cargo ships at berth
- Equipment must be newly manufactured
- Ineligible costs include shipside modifications to accept capture and control system, barge or other acquisition and modification for a portable system, design, engineering, testing, consulting, environmental review, legal fees, permits, licenses and associated fees, taxes, utility construction or metered costs, insurance, operation, maintenance, and repair
- Commit to a project life of 10 years with:
  - 100% California operation
  - At least 1,000 hours per year within the San Diego/Border trade corridor
  - At least 10% of its operation within the San Diego/Border trade corridor
- Document the system is commercially available and achieves an overall efficiency rate of at least 80% for the capture and removal of NOx and PM
- Demonstrate system performance and efficiency with source testing prior to funding and annually thereafter by capturing emissions from a cargo ship at port. Performance measures include: (i) no visible emissions after bonnet is connected to the vessel (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

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- Obtain a 10-year manufacturer's warranty (including labor and materials), or if the equipment owner is the manufacturer, provide a guarantee 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

#### **GENERAL CONTRACT REQUIREMENTS FOR SHIPS AT BERTH (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:
  - Equipment inspections at a District's designated time & location
  - 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)
  - 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
  - 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 that as noted above in the Eligibility Section
  - 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
  - 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
  - The District may allow the equipment owner to modify the approved project schedule and associated milestone completion dates after contract execution
  - Any other program provisions described in the Program Guidelines

#### **APPLICATION SUBMITTAL REQUIREMENTS**

Once a GMERP application for shore power 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.

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#### **EQUIPMENT PROJECT PURCHASE RESTRICTIONS**

At its own risk, the equipment owner may elect to proceed with certain preliminary activities prior to the execution of the equipment project contract without assurance of Program funding or priority for such funding.

Activities that **may begin** prior to the execution of the equipment project contract include the following planning, procurement and infrastructure upgrade activities:

- Design
- Engineering
- Execution of design, procurement and/or installation contracts for any element of the project (equipment owner may proceed with contracts at its own risk with no assurance of Program funding)
- Ordering of any materials or equipment
- Installation of industrial station, substation(s), switchgear or other materials and equipment designed to increase the electrical power capacity available to the port for use at one or more berths (hereafter called “power upgrade project”). This work is typically an upgrade or addition to the existing 34kV or 12kV system and may also serve berths that are not funded under the Program
- Site preparation, grading, paving, excavation and trenching designed to accommodate materials, equipment or site access directly related to the power upgrade project work
- Activities related to ineligible project costs, including: environmental review, legal work, acquisition of permits and licenses, and shipside modifications

Activities that **may not begin** prior to the execution of the equipment project contract include the following installation activities:

- Installation of materials, equipment pads, substation(s), transformer(s), switchgear or other equipment not directly related to the power upgrade project work
- Installation of transmission lines, equipment or related work that connect the power upgrade project to a substation, transformer, vault, cable reel or other “downstream” device for a berth that will be funded by the Program. This work typically includes 34kV or 12kV transmission lines that run from the power upgrade project equipment to 6.6 kV step-down voltage equipment and beyond
- Site preparation, grading, paving, excavation or trenching not directly related to the power upgrade project work
- Installation of vaults, plugs, cabling and cable reels designed to facilitate ship connections to the electricity grid

#### **PAYMENT PROCESS**

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

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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 site has been pre-inspected and the contract signed between the equipment owner and the District.**

#### **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:

- 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 owner must submit proof of project costs through copies of the original invoices. Additional information may be required by the District
- Reimbursement to equipment owners cannot exceed the amount directly paid by the equipment owner
- For grid-based power projects with a seaport equipment owner, up to 80% of eligible costs will be reimbursed, subject to the following requirements:
  - Equipment owner has expended all non-Program match funding and is in compliance with the equipment project contract
  - A minimum of 20% of the project funds will be held in retention until the post-inspection is completed and the project is demonstrated to the District inspector to be fully operational and powering a ship docked at the berth

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](http://www.arb.ca.gov/gmbond).

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#### **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](http://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.**

#### **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>
- CA Ships at Berth Regulation: <http://www.arb.ca.gov/ports/shorepower/shorepower.htm>

#### **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**

Equipment must operate **at least 10%** of its annual hours at seaports 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.

