

2011-12 Grant Proposal Solicitation
Air Quality Improvement Program (AQIP)

**ADVANCED TECHNOLOGY DEMONSTRATION PROJECTS:
ADVANCED HYBRID TECHNOLOGIES IN SCHOOL BUSES**

**Mobile Source Control Division
California Air Resources Board
October 14, 2011**



**California Air Resources Board
Air Quality Improvement Program (AQIP)**

**Advanced Technology Demonstration Projects:
Advanced Hybrid Technologies in School Buses**

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SUMMARY

The Air Resources Board (ARB or Board) is soliciting a grantee for up to **\$1,000,000**, encompassing one to three independent projects for demonstration and administration of advanced hybrid technologies that are applicable to school buses. This solicitation is issued under the Assembly Bill 118 (AB 118) Air Quality Improvement Program's (AQIP), Advanced Technology Demonstration Projects and is intended to fund technologies on the cusp of commercialization with the potential for significant targeted reductions in criteria pollutants and overall greenhouse gas emission reductions. This competitive solicitation is open to local air districts or other California-based public agencies that demonstrate the requisite technical and administrative expertise. All work must be completed by June 30, 2014. Specific tasks are outlined within this solicitation. The proposal deadline for this solicitation is **December 14, 2011**.

BACKGROUND

In 2007, the *California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007* (AB 118, Statutes of 2007, Chapter 750) was signed into law. The Act created the AQIP, a voluntary incentive program administered by ARB, to fund clean vehicle and equipment projects, air quality research, and workforce training. ARB's appropriation for AQIP projects in the Fiscal Year (FY) 2011-12 State Budget is \$40 million¹. Based on projected revenues for the AQIP in FY 2011-12, ARB estimates approximately \$28 million will be available for grants.

In July 2011, ARB adopted the AQIP Funding Plan for FY 2011-12 (Funding Plan). The AQIP Guidelines, approved by the Board in 2009, establish minimum administrative and implementation requirements for the AQIP, while the Funding Plan serves as the blueprint for expending FY 2011-12 AQIP funds. The Funding Plan focuses AQIP on supporting development and deployment of the advanced technologies needed to meet California's longer-term, post 2020 air quality goals, and directs about 5 percent of FY 2011-12 AQIP funds to Advanced Technology Demonstration Projects.

ARB's goal under the Advanced Technology Demonstration Projects is to fund emerging strategies that are near deployment (less than three years from commercial application and past the initial research and development stage); and that have the potential of reductions in criteria and toxic air pollutants, with greenhouse gas reductions as a desired co-benefit. A significant investment of

¹ In the *AB118 Air Quality Improvement Program Funding Plan for Fiscal Year 2011-12* the Board approved \$3 million for the Advanced Technology Demonstration Projects based on a \$40 million appropriation for AQIP projects in the State Budget. The Funding Plan included provisions to scale funding targets proportionally based on the final budget allocation. Projected revenue for the AQIP in FY 2011-12 is estimated to be about \$28 million rather than \$40 million.

AQIP funds in the School Bus category can yield strategically focused emission reductions directed at reducing the exposure of school-aged children to toxic and smog forming diesel vehicle emissions. Additionally, the demonstration of advanced hybrid technology in school buses will accelerate the implementation of new cleaner technologies in this sector. The July 2011 Board-approved Funding Plan allows for the demonstration of advanced hybrid technology in school buses.

This competitive solicitation is the sole grant opportunity for school bus demonstration projects this fiscal year and will be focused on advanced hybrid technologies.

NEED FOR EMISSIONS REDUCTIONS FROM CATEGORY

Diesel-fueled school buses play an important role in the daily life of many California school-aged children. Due to children's daily proximity to school buses they can be potentially exposed to both cancer causing and smog forming chemicals on a regular basis. Diesel exhaust from school buses contains diesel particulate matter (PM) a Toxic Air Contaminant and Oxides of Nitrogen (NOx) a smog precursor in the formation of ozone.

Significant progress has already been made in reducing emissions from diesel engines to comply with 2010 model-year diesel engine standards. However, further reducing the exposure of school-aged children to PM and NOx emissions through advanced hybrid school buses will provide additional long-term benefits. Significant reductions in greenhouse gas emissions can also be achieved while providing an ancillary benefit of reduced operational costs resulting from lower diesel fuel and maintenance expenditures.

The AB 118 AQIP program is one of several incentive programs at ARB that is specifically designed to introduce and accelerate the commercialization of heavy-duty hybrid vehicles into California's marketplace. In order to do so, it is critical that funds are made available to public agencies such as school districts, to provide them with the opportunity to experience and embrace this new technology. By giving school districts the opportunity to drive and operate advanced hybrid school buses during this demonstration, school districts will be better able to make logical and informed decisions regarding future school bus purchases that employ advanced hybrid technology.

ELIGIBILITY

The ARB is soliciting proposals for a Grantee to administer and implement the demonstration and administration of advanced hybrid technologies that are applicable to school buses. This competitive solicitation is open to local air districts or other California-based public entities, with expertise implementing demonstration projects, to act as the lead agency providing administration and

oversight for the demonstration project. Interested private sector parties, i.e. technology demonstrators, must partner with an air district or other California-based public entity in submitting a demonstration project application.

An air district or other public entities can request demonstration project funds, without an identified technology demonstrator, with a commitment to solicit for a project once funds are secured from ARB via this competitive solicitation process. However, projects that already have all the needed participants, such as school districts, technology demonstrator and eligible grantee will score higher than those that do not have team members identified in advance.

If a public agency is selected as the Grantee, it will be required to submit a resolution of the agencies Governing Board prior to execution of the Grant Agreement that commits the agency:

- To Comply with the Requirements of Advanced Technology Demonstration Projects
- Authorizes the Agency to Accept the Grant Funds from ARB

If the public agency that is submitting the application contributes a match to the project, the board resolution shall authorize the Air Pollution Control Officer or other legally authorized official to supply sufficient funding to meet the stated match commitment. Signed grant agreements and approved board resolutions need to be in place on or before the deadline listed in the Solicitation Timelines on page 9.

Sub-agreements between the technology demonstrator and the applicant need to be in place before work can start on projects selected for funding. The deadline for having the sub-agreement in place is also provided in the Solicitation Timelines on page 9.

Only applications from eligible applicants will be scored.

This solicitation covers the use of technologies that can reduce emissions of criteria pollutants and greenhouse gases from school buses. Projects funded under this solicitation must be within three years of commercialization.

RESPONSIBILITIES OF GRANTEE AND TECHNOLOGY DEMONSTRATOR

The Grantee will be responsible for administration of the demonstration project and its major roles will include:

- Submission of Demonstration Project Application to ARB
- Administration of the Project
- Oversight of Technology Demonstrator
- Report to ARB on Project Status and Grant Performance

- Submission of Periodic Reports and Grant Disbursement Requests to ARB
- Coordinate Periodic Project Status Update Meetings

The Technology Demonstrator's major roles in the demonstration project will include:

- Team with Air District or other Public Agency to Develop Demonstration Project Application
- Provide the Technical Expertise in Performance of the Demonstration
- Timely Achievement of Stated Demonstration Project Goals
- On-Time Reporting to the Grantee on Project Status and Grant Performance

Progress reports from the Technology Demonstrator shall be submitted, at a minimum of three month intervals, to the Grantee. The Grantee is responsible to forward any progress reports unaltered to the ARB within 7 business days. Additionally, every grant disbursement request shall be accompanied by a progress report that documents the time interval seeking disbursement for and the completion of specific project milestones including any specific deliverables as defined for that milestone.

A final report will be required to be submitted from the Grantee and Technology Demonstrator at the conclusion of the demonstration project. The demonstration project will not be complete until the final report has been accepted by the ARB. The contents of the final report will be agreed to in advance by the grantee, the Technology Demonstrator, and the ARB. The final report will include, but will not be limited to, a summary of the progress reports, provide any deliverables that were committed to in the project proposal, and will detail the results from any emission testing performed. The final report is due to ARB no later than June 15, 2014.

Additional reporting requirements are detailed in the Reporting and Monitoring Requirements section of this solicitation.

ELIGIBLE PROJECTS/SCOPE OF WORK

This solicitation covers administration and demonstration of advanced hybrid technologies that are applicable to school buses. The ARB believes that direct experience with advanced technology hybrid school buses will provide school districts with the necessary information to make informative decisions when deciding how to shape their future school bus fleets.

School buses that participate in the demonstration project will need to be equipped with an advanced hybrid drive system. For purposes of this solicitation a hybrid drive system is defined as having two power sources that are used for

propelling the bus. The primary power source can be the buses engine, battery pack, or some other source that provides the primary propulsion of the bus. The secondary power source can be a battery pack, or some other energy storage system that does not collect energy directly from the primary power source. Secondary power collected from regenerative braking, electrical grid power, or some other source that then supplies stored energy to provide school bus propulsion satisfies, for the purpose of this solicitation, the definition of a hybrid drive system.

School buses funded under this demonstration will need to provide home to school transportation for school children in the state of California and as a result will need to successfully pass a California Highway Patrol (CHP) safety inspection and be issued a valid CHP form 292. A successful demonstration project application will clearly describe a reasonable plan for achieving CHP safety certification before the field demonstration portion of the project is started. The application's project narrative must include the timeframe for achieving CHP safety certification of the advanced hybrid school bus and only operate the advanced hybrid school bus once the CHP safety certification is in place.

Several types of proposals for this demonstration project would be acceptable. For example, a demonstration project could use commercially available advanced hybrid school buses with the intent of deploying those buses among willing school districts so that they could gain real world experience with advanced hybrid school buses. Alternatively, a successful demonstration project could use advanced hybrid buses that are not yet commercially available with the intent of demonstration the viability of such buses in real world applications. A combination of each of the above described project schemes or some other scenario could produce a valid demonstration as long as the main components are incorporated. The main components of a valid school bus demonstration include:

- Demonstration Plan for Advanced Hybrid Technologies in School Buses
- CHP Safety Certification Plan
- Buses used to Transport School Children From Home to School
- Data Gathering and Vehicle Sharing Plan
- Compliance with the Conditions of this Solicitation, the Funding Plan and the AQIP Guidelines
- Data Collection and Reporting Element
- Emission Performance Testing

The ARB will have the final determination of the exact parameters that will be collected from the school buses and related infrastructure during the demonstration. Data parameters that will be collected will require the prior approval of ARB.

This solicitation may fund such activities as pilot demonstrations, the construction and deployment of prototypes, emissions testing, and practical demonstrations of technologies with a high potential to be commercialized. It may not be used to fund basic research or design-only projects. Field applications as demonstrations of practical utility are required.

The demonstration of advanced hybrid school buses must have an identifiable potential market and reasonable economics, and its full commercialization should provide economic benefits to California.

Reproducible emission testing to verify the emission benefits from the demonstration of technologies funded under this solicitation will be required to be performed and described in the final report, including the anticipated cost effectiveness of the project once introduced into the market place. If NO_x emissions are being measured the result will be shown as NO_x and NO plus NO₂. The emission testing procedure used to verify emission reductions should be cited in the application's project narrative. The final emission testing procedure will be subject to ARB approval.

Data collected from emission testing as part of a selected demonstration project and included in the application's submitted workplan and proposed projects scope of work can be applied toward ARB or U.S. EPA certification or verification. However, AQIP Advanced Technology Demonstration Projects funds can not be used directly to fund formal ARB and U.S. EPA verification or certification processes.

If the proposed project uses any vehicle, engine, retrofit or piece of equipment that has or will be funded in whole or part by the Lower-Emission School Bus Program, the Small School District School Bus Replacement Program or other public incentive programs and is still under contractual obligations, its incentive program status must be identified in the application's project narrative. Additionally, the project narrative must include a plan to ensure that emission reductions required by any incentive program's contract or grant are considered for the piece of equipment that is proposed to be used for the technology demonstration.

AVAILABLE FUNDING

The total funding available through this solicitation for the Advanced Technology Demonstration Projects to demonstrate advanced hybrid technology in school buses could be up to \$3 million. However, it is anticipated that only up to \$1 million will be available for this demonstration. Funding is dependent on the availability of State funds. The estimated number of projects selected for funding is expected to be between one and three projects. Administrative costs may not exceed 10 percent of the total cost budget for the proposal and only 10 percent of AQIP funds may be used for administrative purposes.

REQUIRED MATCHING FUNDS

The applicant match is required to be a minimum of 50 percent of the total project budget. Of the 50 percent required match, 10 percent of funds must be cash committed by the applicant or technology demonstrator (exclusive of providing in-kind contribution). Match funding must be provided in the following manner:

1. A minimum of 10 percent cash from the applicant or demonstrator
2. Up to 40 percent through some combination of in-kind contributions such as labor, equipment, materials, equipment transportation, private financing and federal or state funds.

Project facilities, laboratories, or property will not be considered as part of a proposed in-kind match whether owned or leased by the grantee or technology demonstrator.

If a third party, (i.e., a party other than the grantee or technology demonstrator) proposes to provide any part of the required match, the applicant must include a letter from each third party stating that it is committed to providing a specific dollar value of cost sharing and the source of such funds. An applicant and its partners must demonstrate technical and fiscal resources sufficient to meet their cost share commitment and complete the proposed project.

PROPRIETARY INFORMATION AND INTELLECTUAL PROPERTY

ARB will not make any claims as to ownership of equipment funded by Advanced Technology Demonstration Projects funds. The technology demonstrator and grantee will make available information and data generated as part of the project that is described in the proposed work plan and scope of work which will be included in the grant application. Additionally, the technology demonstrator and grantee will make available any information and data needed to satisfy the requirements discussed in the Reporting and Monitoring Requirements section of this solicitation.

ARB can keep confidential only certain types of information provided in proposals that have been submitted in response to solicitations. Data gathered on actual emissions to the air, as part of this demonstration project cannot be protected from disclosure. Any information determined to be a trade secret or otherwise exempt from disclosure under the Public Records Act or other provisions of law must be labeled "confidential." Review Appendix A, Attachment 4 for procedures for handling confidential information. If you wish to include confidential information, you must:

- Complete the Confidentiality Provision (Appendix A, Attachment 4) and attach it to your proposal
- Separate confidential pages from the other elements of the proposal (do not include any confidential information in the main proposal)
- Clearly label every confidential page as “CONFIDENTIAL”

Proposals will be reviewed by ARB staff and may include reviewers outside the ARB associated with public universities in California and other State government agencies as needed. In the proposal, at the point where the information would appear if it were not confidential, please indicate its existence under the separate cover. Please provide the name, address, and telephone number of the individual to be contacted if ARB receives a request for disclosure of the information claimed as confidential.

APPLICATION REQUIREMENTS

Eligible applicants must meet all applicable requirements of State law, AQIP Guidelines, Funding Plan, and this solicitation. To be considered for the grant award, applicants must complete the project application and demonstrate that they meet the required solicitation elements. ARB may request clarification regarding application responses during the application review process. Only applications that contain all the required elements as described in the Application Content and Organization section and Appendix A of this Solicitation will be scored.

Please enclose with your proposal any documents (or pertinent excerpts) that you cite in support of performance claims in your proposal. However, do not include materials that are not needed to supply the information requested in these instructions. ARB will not review patent documents, engineering drawings and specifications, or promotional materials.

Include in your application package letters of support from project partners that describe the nature of their contribution to the project.

The application package must include four signed original copies and one compact disk containing the application package, including, as a single electronic file, all the required documents in MS Word 2003 or PDF format. Applications that do not meet the above file requirements may not be scored.

APPLICATION PROCESS

The application packet contains the application and information necessary for submittal of a complete application. ARB shall select the Grantee in compliance with the AQIP Guidelines, this solicitation and applicable State law. Demonstration project Grantee selection will be based upon the scoring criteria identified in this solicitation.

If you need this document in an alternate format or language, please contact Ms. Grace Garcia at (916) 323-2781 or ggarcia@arb.ca.gov . TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Four signed original copies and one CD of the application must be received at the Air Resources Board headquarters at 1001 I Street, Sacramento, CA 95812.

Applications must be mailed to the following address:

Ms. Grace Garcia
Air Resources Board
Mobile Source Control Division
1001 I Street, P.O. Box 2815
Sacramento, CA 95812

Applications must be received by Ms. Grace Garcia by **December 14, 2011 5:00 PM**. Please provide enough time to allow for delivery to ensure that the above application submittal deadline is met. Applications received after submittal deadline shall not be scored.

Please send an email to Ms. Grace Garcia at ggarcia@arb.ca.gov identifying that you have submitted an application. ARB will confirm with the applicant that the application was received.

No applications may be submitted by fax or email.

Solicitation Timelines

Public Release of Solicitation	October 14, 2011
Applicant Workshop	October 27, 2011
Application Deadline	December 14, 2011 5:00 PM
Review/Rating of Applications	December 15-23, 2011
Grantee Selected	December 30, 2011

Signed Grant Agreement and Board Resolution Returned to ARB	February 29, 2012
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Sub-Agreement Between Public Agency and Technology Demonstrator is in Place.	April 27, 2012
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Timelines are subject to change at ARB's sole discretion.

Applicants Workshop

ARB will hold an Applicants Workshop at which time staff will be available to answer questions potential applicants may have regarding eligibility, application completion and other issues.

The Applicant Workshop and conference call will be at:

Date: **October 27, 2011**
Time: 10:00 AM to 11:30 AM
Place: Cal/EPA Headquarters
1001 I Street, Sacramento
Conference Room 2410

Call-in Number: **1-888-989-6518**
Passcode: **18600**

The workshop will be open to all interested entities. A call-in phone number is provided for those unavailable to attend in person. The intent of the workshop is to provide potential applicants with an opportunity to ask clarifying questions regarding general application, applicant requirements or terminology definitions. Written questions submitted before the workshop will be given priority.

Questions may be e-mailed to Mr. Earl Landberg at elandber@arb.ca.gov and may be submitted by 5 p.m. up to two days prior to the workshop. The questions and answers from the workshop and any questions received via e-mail by 5 p.m. on October 25, 2011 will be posted on the ARB website no later than 5 p.m. on November 7, 2011, ARB will not answer questions regarding this solicitation after the Applicant Workshop. Any verbal communication with an ARB employee concerning this solicitation is not binding on the State and shall in no way alter a specification, term or condition of the solicitation.

APPLICATION CONTENT AND ORGANIZATION

The ARB strongly encourages applications to be accurate, brief and clear. Applications will be initially screened for completeness. The application packet for this solicitation is included in Appendix A, and includes the following elements:

- A. Applicant Information and Qualifications
- B. Project Description
- C. Proposed Budget
- D. Confidentiality Provision
- E. Letters of Commitment

Completed applications should be assembled in the above order when submitted.

EVALUATION AND SCORING

The ARB will evaluate each application based on the criteria described below; the maximum score is 100 points. The qualified applicant with the highest overall score will be selected for funding; however, ARB is not required to award funds if ARB determines the proposed project does not satisfy the goals of this solicitation. Up to three independent projects will be funded under this solicitation. The total amount funded for the entire category will not exceed \$3,000,000, however, it is anticipated that only \$1,000,000 will be available for this demonstration. If additional funds become available and valid applications remain unfunded, those projects may be funded without reissuing a solicitation. If an agreement with the highest scoring applicant cannot be reached by the specified date established by ARB, then ARB may select the next highest scored proposal until an agreement is reached, or exercise its right to, in its sole discretion, throughout this process to not award a grant or for any funds that remain unawarded may redirect those funds to other AQIP projects or demonstration project categories.

The successful applicant will be required to sign a grant agreement with ARB to fulfill the administrative duties and technical duties associated with the project (see Appendix B for a Sample Draft Grant Agreement). Signed grant agreements and approved Board resolutions must be returned to ARB no later the deadline described in the Application Process section of this solicitation. If project grant agreements and approved Board resolutions are not returned by the deadline, the ARB, in its sole discretion, may rescind the grant award and can redirect funds to another submitted application to this solicitation or to another project in the Funding Plan as needed.

If, in the ARB's sole discretion, no submitted proposal meets the goals of this solicitation, Funding Plan or AQIP Guidelines, no selection of a Grantee or Technology Demonstrator will be required to be made and funding can be directed to another project in the Funding Plan as needed.

If two or more applications are submitted for the same project those applications will be scored separately and the highest scoring project will then compete against the remaining individual projects.

Summary of Scoring Criteria for Demonstration Projects

	Scoring Criteria	Points
1	Relevance to the Solicitation Objective and Potential Emission Reduction Benefits	20
2	Match Funding and Financial Capabilities	15
3	Project Objective and Work Plan	10
4	Technology and Innovation	15
5	Application Completeness	10
6	Potential for Market Penetration and Commercialization of the Technology	10
7	Environmental Justice	5
8	Project Team Capabilities and Degree of Industry Collaboration	10
9	Timeline for Project Completion	5
	TOTAL	100

The **PROJECT NARRATIVE** must separately address each of the scoring criteria listed below, see instructions for the project narrative in Appendix A, Attachment 2.

1. **Relevance to the Solicitation Objective and Potential Emission Reduction Benefits** **20 Points**

- Describe how the project meets ARB's goal under the School Bus Category for the Advanced Technology Demonstration Projects as described in this solicitation and the Funding Plan.
- Describe the estimated cost effectiveness of the technology in dollars per ton of criteria pollutant reduced using the current Carl Moyer Program cost effectiveness methodology during the demonstration and when deployed into the marketplace. This methodology, relevant tables and instructions are included in Appendix C of this solicitation. Assume that the baseline school bus is diesel fueled and is equipped with a model year 2011 engine. Provide a clear and concise description of the methodology employed in determining any potential greenhouse gas emission reductions. **Show all math used in calculations.**
- Describe the utility of the innovative technology to help California achieve its air quality goals with the objective of reducing criteria pollutant and greenhouse gas emissions from the Advanced Hybrid School Bus Category.

2. **Match Funding and Financial Capabilities** **15 Points**

- Provide a clear and concise project budget that lists all expenditures for the project in a logical sequence that leads to on-time completion of the project. See sample budget in Appendix A Attachment 3.

- Demonstrate that the applicant and/or technology demonstrator will be financially capable of providing the minimum 50 percent match requirement of the total project budget (including the 10 percent cash requirement exclusive of in-kind contributions). Higher match pledges will be scored higher.
- Describe each financial contribution to the project, in addition to describing other current and pending funding sources for the required cost share match. Identify if all or a portion of the match funding is dependent upon successful grant award under any other solicitation.
- Attach Letter(s) of Commitment from each third party (i.e., a party other than the organization submitting the application) stating that it is committed to providing a specific minimum dollar amount of cost sharing. Letters must be signed by the person authorized to commit the expenditure of funds by the entity.

3. Project Objectives and Work Plan

10 Points

- Provide a concise statement of the specific goals and objectives of the proposed project.
- In a logical sequence, describe the tasks necessary to prepare for and conduct a practical demonstration of the innovative technology. Tasks should be divided into the phases of the project, as appropriate, and described in enough detail for reviewers to understand the scope of the work.
- Provide quantitative milestones for each budget period of the project, and identify them with a title and planned completion date. The general duration for each task should be specified.
- Identify the school districts that will be using the buses, data to be collected, the conditions under which they will be collected, and the test methods.
- Indicate the budget and source of funding for each task and what entity (applicant or industry partner) will perform the task.
- Identify the resources (e.g., equipment, machine and electronic shops, field and laboratory facilities, materials, etc.) to be used at each performance site listed. Describe only those resources that are directly applicable to the proposed work. List important items of equipment already available for this project. If proposing an equipment acquisition, describe comparable equipment, if any, already at your organization and explain why it cannot be used.

4. Technology and Innovation

15 Points

- Identify and describe the technological innovation that is the basis for the proposal. If the innovation is a component of a device or process, also

describe the device or process. Descriptions should be understandable to reviewers who are not expert in the field. Cite (but do not include) patents if needed. Describe exactly what part of the technology is innovative, how it is innovative, and how it works.

- Explain the technical advantages of the innovation and document performance claims.
- Describe what type of emission testing has already been done on the proposed technology.
- Describe the economic benefits that a school district could expect if they operated buses that are part of this demonstration.

5. Application Completeness

10 Points

- Applications that are clear, concise, and include all the requested information will be scored higher than those that are unclear or missing information. Do not make a declaration as to application completeness in your submittal.
- Provide a written affirmation in the project narrative that all parties participating in the demonstration have read the Sample Grant Agreement that is included in this solicitation packet as Appendix B.

6. Potential for Market Penetration and Commercialization of the Technology

10 Points

- Define target markets and explain why the targeted industries would buy the innovation after a successful demonstration project. Both markets within and outside of California should be considered.
- Describe the recent and expected growths or declines of the targeted industries.
- Identify the specific market niche for the proposed technology and describe its size and potential for growth.
- Describe any specific barriers to entry or expansion.
- Describe any special training that will be required for installation and maintenance personnel.

7. Environmental Justice

5 Points

- Explain how the proposed project, and the expected commercialized outcome of the project technology, will benefit at risk communities or populations in environmental justice areas. Proposed projects with the potential to benefit environmental justice communities that can demonstrate how the potential

project would address the ARB's Environmental Justice policy will be scored higher. The ARB's Environmental Justice policies can be found at: <http://www.arb.ca.gov/ch/programs/ej/ejpolicies.pdf> .

8. Project Team Capabilities and Degree of Industry Collaboration

10 Points

- Describe the roles and the work to be performed by each of the project's key participants, including project administration, project planning, field demonstration, and data collection and reporting.
- Describe the administrative and technical qualifications and capabilities of key personnel, such as education and training, research and professional experience, publications (patents, copyrights, and software systems may be provided in addition to or substituted for publications), and ability to administer similar air quality programs.
- Describe the applicant's relationship and degree of collaboration with school transportation industry partners on the proposed project. Describe what business alliances and partnerships will be involved in commercialization.
- Performance of the Grantee and Technology Demonstrator with previous AQIP projects will be considered.

9. Timeline for Project Completion

5 Points

- Provide a project schedule including the milestones as described in the "Project Narrative and Workplan" section of Appendix A. Both a tabular and graphic display (such as a Gantt chart) of the project schedule is preferred, but at a minimum a tabular display is required. Information must include task duration, start and completion dates, in addition to the milestones.
- Demonstrate that work will be accomplished by June 30, 2014.

IMPLEMENTATION PROCESS

Meetings

Before work begins, a kick-off meeting will be held in Sacramento between the grantee, the technology demonstrator, and the ARB project management staff. The purpose of this meeting will be to discuss the work plan, details of task performance, the project schedule, any changes to the project team, and any issues that may need resolution before the ARB-funded work begins. Meetings to discuss progress will be held at least quarterly, with telephone conference calls being acceptable upon approval of the ARB grant liaison. Site visits by ARB staff may be required at ARB's sole discretion. A final meeting, or conference call pending ARB grant liaison approval, will be held at the conclusion of the project to review the results and discuss the status of commercialization plans.

Project Funding Procedure

In order to receive a disbursement, the Grantee must submit a grant disbursement request to ARB. The grant disbursement request form must be signed by the party authorized and designated in Grant Agreement and include all information to substantiate the eligibility of costs to be reimbursed. AQIP grant funds will only be issued for equipment and services that are identified in the Scope of Work and Workplan included in the application package and have already been rendered. A detailed invoice will be required. The advance of grant funds will not be allowed.

Disbursements will be made following the procedure described in the Reporting and Monitoring Requirements section of this solicitation and the signed grant agreement.

Reporting and Monitoring Requirements

To ensure that public funds are being used prudently, reporting on project status and monitoring the project will be required. The selected Grantee must submit status reports accompanying grant disbursement requests to ARB at least every three months, but may be provided on a monthly basis if necessary for more frequent invoicing, with prior approval from ARB. These reports should contain the following information, at a minimum in either MS Word 2003 or PDF formats if submitted electronically as a single electronic file:

- Summary of work completed since the last progress report, noting progress toward completion of tasks and milestones identified in the work plan
- Statement of work expected to be completed by the next progress report
- Notification of problems encountered and an assessment of their effects on the project's outcome
- Itemized invoice showing all costs for which reimbursement is being requested

A final report is required at the end of the project and must include:

- A description of the project's goals and objectives, methods, results of the demonstration, and future application of the technology
- An update on the commercialization prospects

Requests for additional information may be required by ARB, at its sole discretion, to evaluate reports and to determine if a quarterly or final report is complete.

Any change in the project budget, re-definition of deliverables, or extension of the project schedule must be approved in advance by the ARB grant liaison in writing.

Once a grant is in place, minor changes to the work to be done or other project scope changes may be considered by ARB, in consultation with the grantee or technology demonstrator. ARB will not terminate a grant because of minor technical difficulties or minor under-accomplishment of stated project objectives, in ARB's sole discretion. However, ARB reserves the right to terminate a grant if ARB determines, in its sole discretion, that the objectives cannot be reached or that the grantee, technology demonstrator or its subcontractors cannot perform the required work or as specified in Section 6 of the grant agreement.

The grantee and technology demonstrator must allow ARB, the California Department of Finance, the California Bureau of State Audits, or any authorized designee access, during normal business hours, to conduct reviews and fiscal audits, or other evaluations. Granting of access includes, but is not limited to, reviewing project records, site visits, and other evaluations as needed. Project evaluations or site visits may occur unannounced as ARB staff or its designee deem necessary.