## COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF ENERGY RESOURCES (DOER)

Mark Sylvia, Commissioner



#### REQUEST FOR INFORMATION

# Clean Energy and Climate Science Literacy through Public Investments

An Initiative to Impact Current and Future Generations

DOER Issues RFI	February 28 2014
RFI Conference and Q&A	March 18. 2014
RFI Final Responses Due	By 4 p.m., April 3, 2014

Interested parties to this Request for Information (RFI) are invited to attend the RFI Conference and Q&A session (see calendar above) and/or submit questions to Tom Witkin at <a href="mailto:tom.witkin@state.ma.us">tom.witkin@state.ma.us</a>. This RFI is being issued by the Massachusetts Department of Energy Resources (DOER) Marketing & Stakeholder Engagement team.

Responses to this RFI shall serve solely to assist DOER in understanding the current level of readiness of the energy, education, and marketing communities to provide education and educational materials capable of meeting the goals of the Patrick Administration. The information gathered through this RFI will inform DOER of those capabilities in connection with the potential development of a solicitation for a Request for Responses (RFR) or Request for Proposals (RFP) in the future. This RFI does not in any way obligate or require DOER's Commissioner to issue or amend a solicitation or to include any of the RFI provisions or responses in any potential future solicitations. Responding to this RFI is entirely voluntary, and

will in no way affect the Commissioner's consideration of any proposal submitted in response to any subsequent solicitation, nor will it serve as an advantage or disadvantage to any respondent bidder in the course of any RFR or RFP that may be subsequently issued or amended. This RFI is not an open solicitation for any products or services, but rather is an informational inquiry by DOER into the capabilities and readiness of respondents to meet the challenges posed by the scopes outlined in this RFI. This RFI is NOT a contract or a contract solicitation. Submission of a response to this RFI does NOT create any obligations, contractual or otherwise, on behalf of DOER. Submission of a response to this RFI does NOT create any type or level of agency or partnership or any employer/employee relationship between the submitting vendor and DOER.

RFI Bidder Conference and Q&A

Date: March 18. 2014

Time: 2:00 PM

Location: 100 Cambridge Street

Conference room TBD Boston, MA 02114

Call-in/View: https://www4.gotomeeting.com/join/662512543

Use your microphone and speakers (VoIP) - a headset is

recommended. Or, call in using your telephone.

Dial +1 (213) 493-0602 (or number specified on screen)

Access Code: 662-512-543

Audio PIN: Shown after joining the meeting

Meeting ID: 662-512-543

#### 1. Introduction

This Request for Information (RFI) is being published to solicit information about current market availability and capabilities of respondents to provide the tools necessary to have a direct impact on K-12 curriculum, teachers and students and to provide educational displays and messaging in schools, state and municipal facilities, with the potential to expand usage to businesses, campuses, and homes. Information sought through this RFI includes, but is not limited to, capabilities necessary to meet those challenges. Further details of the two scopes of work are described in later sections of this document.

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RFI Name: Clean Energy and Climate Science Literacy through Public

Investments

RFI File Number: RFI-ENE-2014-024

### RFI-ENE-2014-024 Clean Energy and Climate Science Literacy through Public Investments

### An Initiative to Impact Current and Future Generations

Massachusetts is a national leader in energy efficiency, renewable and alternative energy, greenhouse gas emissions reduction, and in its clean energy industry. But the Patrick Administration understands that to continue the Commonwealth's progress and meet its clean energy and greenhouse gas emissions reduction targets, its residents, young and old, need to achieve a higher level of literacy in these topics to fulfill our generational responsibility.

Clean energy is critical to the Commonwealth in terms of:

- Clean energy economy and related job growth: In 2013, nearly 5000 clean energy firms were employing nearly 80,000 clean energy workers. (Note that the Massachusetts <a href="Curriculum Framework Draft Standards">Curriculum Framework Draft Standards</a> makes "career readiness in science and technology/engineering" a specific recommendation.)
- **Greenhouse gas mitigation**: under the <u>Global Warming Solutions Act</u>, Massachusetts has set the strongest greenhouse gas reduction targets in the nation 25 percent below 1990 levels by 2020 and 80 percent by 2050.
- **Increasing energy independence:** Massachusetts spends billions of dollars every year to buy the energy that runs our power plants, our buildings and our vehicles, with the vast majority of it flowing right out of state and out of the country. This represents lost economic opportunity that Massachusetts stands poised to reclaim through investments in home-grown renewable energy like solar or wind and energy efficiency.

#### 2. Overview

The Massachusetts Department of Energy Resources (DOER) is responsible for promoting the development of sound energy education programs.

As part of its Clean Energy and Climate Science Education Initiative, DOER proposes to increase the public's awareness of the benefits of clean energy investments in two ways:

- facilitate the integration of clean energy and climate science into Massachusetts' K-12 Science, Technology and Engineering (STE) curriculum frameworks
- enhance the clean energy and climate science literacy of students, school communities and all citizens interacting with state and municipal governments

The first focuses on clean energy and climate science as important and powerful integrating themes for teaching science, technology and engineering; themes that are critical for preparing our citizens for their future and the future of the Commonwealth.

Given the importance of clean energy and climate preparedness in Massachusetts and DESE's upcoming revisions to the Commonwealth's Science and Technology/Engineering (STE) Curriculum Framework, DOER and EEA have a unique opportunity to influence incorporation of clean energy in the new standards as a compelling theme to bring together for students a wide range of STE curriculum topics. STE lessons designed around clean energy can bring sometimes abstract concepts into the realm of exciting, real-world issues.

The second will leverage the vast array of energy upgrades that have been made in public buildings and infrastructure across the state to create teachable opportunities. DOER intends to link each learning opportunity to a pathway for participation.

Whenever there is a public investment in energy improvements that have an impact on our citizens – whether from the point-of-view of energy savings, greenhouse gas mitigation, jobs or education – information about the technology, the science, the benefits and the linkage to actions should be shared in an engaging, powerful way. To the extent possible, this content for schools and municipal buildings should be developed by or with K-12 students. Similar content/media also should be usable in businesses and homes, as desired.

These two tracks will be accomplished by

- expanding the number of teachers who access and engage with related education, training, and curriculum
- broadening exposure of K-12 students to related education and curriculum, especially in schools that would benefit from enrichment of curriculum supporting the Massachusetts frameworks, to encourage a life-long passion for science inquiry
- creating statewide energy and environment communications standards that will be used to provide consistent educational messaging and visual displays related to energy improvements made in
  - schools, state and municipal facilities, and
  - commercial buildings that have used state-directed funds for those improvements.

#### Deliverables

All deliverables will reinforce the overall initiative, and each element will be consistent with and support other elements. Materials, messaging, and visual displays must be developed so that they

could be extended beyond public investments, to clean energy improvements in the private sector.

#### Direct Impact on K-12 Curriculum

- Expanded access to teacher training workshops, together with motivation for teachers to attend
- Greater availability and use of classroom kits related to clean energy and climate science
- Distributed, self-administered training resources related to the kits, to optimize effectiveness of the kits

#### **Direct Impact on Students**

- Expanded access to hands-on learning in the classroom
- Greater availability of hands-on learning though visits to appropriate facilities
- Resources that enable students' on-going engagement with clean energy and climate science learning

#### Education for the Public through Clean Energy Investments

- Easily accessible information on energy basics: what it is, where it comes from, and what it provides to citizens, together with the levels and potential impacts of greenhouse gas emissions produced by production of that energy.
- Tailored, easily understood educational content that uses a standard format to explain energy efficiency and renewable energy improvements completed in municipal and state buildings
- Public presence and awareness about Massachusetts clean energy accomplishments that complement and reinforce DOER, MassCEC and Mass Save® brand identities. The resulting graphic treatments will be rendered in displays (e.g., signs, plaques, posters, web content, stickers)

#### 4. Scope of Work - 1 – Direct Impact on K-12 Curriculum and Students

DOER seeks assistance to help excite students about STE education and improve learning by increasing access to clean energy and climate science topics ("topics"). The direct impact program will give teachers improved access to topic resources, train them in effective use and delivery of those resources, and facilitate students' hands-on access to high quality programs related to the topics. The program will identify the most effective resources and factor in financial considerations, detailing the most cost-effective resources.

DOER's direct impact program will adhere to this guiding principle: students' STE education will be more effective if hands-on examples based on clean energy and climate science topics are used to:

• excite Massachusetts students, especially those who have received less exposure and motivation to these educational topics

• give all STE teachers, not just those who already have a substantial understanding of these topics, the desire and resources to use the topics as effective teaching tools.

The strategy and output will include:

- benchmark estimates for the number of teachers and students who can be "touched" by the direct impact program, together with measurement approaches that yield metrics related to numbers and impacts
- identification of vendors and partner organizations that can deliver
  - teacher workshop training
  - classroom resources and related training that can be leveraged by teachers
  - in-classroom students workshops at target schools
  - educational sessions for students delivered at the organization's site
- budgets that contain costs for each vendor/organization item
- timelines for implementation of the program's elements
- recommendations for ways to link the direct impact program with the statewide presence and brand created through the program to develop direct education for the public.

The contractor also will make available to DOER:

- web-based templates for
  - submission of requests for sessions (teacher and direct student education, for example, teacher workshops and in-school student sessions)
  - program evaluations
- proposed design, including copy, for related web pages and other media
- other items that may be required to produce an effective direct impact program.

The successful applicant will be responsible for designing and establishing the tools for a statewide direct impact education presence that uses existing educational materials and programs that are consistent with DESE's draft revised STE curriculum standards.

#### 5. Scope of Work – 2 –Education for the Public through Clean Energy Investments

DOER seeks assistance creating a statewide energy and environment presence that will be used to provide educational displays and messaging in schools, state and municipal facilities, and potentially expand to identify improvements in businesses, campuses, and homes. The presence and related branding should illuminate energy measures without regard to what entity was involved in making the measure possible. However, the enabling entity should be noted, where possible.

DOER's public education initiative will adhere to this guiding principle: whenever there is an energy improvement, there will be consistent messaging, media, and/or signage designed to make the audience aware of the:

- energy upgrade: what it is and how it benefits students and other citizens of Massachusetts at a high level (e.g. "reduces your town's energy consumption," not "reduces energy consumption by X%")
- energy upgrades that can be taken by the individual or organization to improve their own buildings and/or behavior
- role of the state entity or program, if any, that helped make it possible

The strategy and output will include:

- brand strategy, including its relationship to related brands (DOER, MassCEC, Green Communities, Accelerated Energy Program (AEP), Mass Save®)
- graphical design and brand identity
- effective messages tied to specific types of facilities and energy upgrades
- agreed upon lexicon of clean energy-related terms
- recommendations for an appropriate mix of media/delivery mechanisms (hard copy, electronic and in-person)
- budget including itemized and total costs to make the media available statewide
- partnering opportunities, with specifics on which organizations should be invited to bid based on attendant offerings available from each potential contractor.

Standards are to be established as part of the brand and must recognize the value of the measure, as established by DOER, and be approved for installation of brand-based signage or communications.

The contractor also will make available to DOER:

- web-based templates for submission of requests by entities for signage and other communications
- proposed metrics for performance of web-based media (e.g. Google Analytics)
- proposed design, including copy, for related web pages
- other items that may be required to produce a compelling state clean energy presence and brand.

The successful applicant will be responsible for designing and establishing the tools for a statewide clean energy education presence via

- standardized educational information about the portfolio of improvements that will be highlighted (e.g., solar panels, weatherization, LED lighting, energy management systems, heat pumps)
- brand identity.

#### 6. Costs

By submitting a response, respondents agree that any cost incurred in responding to this RFI, or in support of activities or presentations associated with this RFI, shall be the sole responsibility of the submitting respondent. EEA/DOER shall not be held responsible for any costs incurred by respondents in preparing their respective responses to this RFI.

#### 7. Review Rights

DOER reserves the right to have a review performed of any and all responses to this RFI, including materials presented at any presentations. Said review may be conducted by, but is not limited to, officials in DOER or any Massachusetts state agency and any independent consultants retained by DOER.

#### 8. Public Record

All responses to this RFI will be public record under the Commonwealth's Public Records Law, Mass. Gen. L. ch. 66 s. 10, regardless of confidentiality notices set forth on such writings to the contrary.

#### 9. Information Requested

Please provide the following for the purposes of this RFI.

Company Name (please list parent company as well)

Company Address

Company Website

Contact name and information (e-mail address required)

Provide a description of your company and the basis of your expertise in offering a response to this RFI.

Please provide email responses to this RFI to the addressee listed above.