

REQUEST FOR INFORMATION
U.S. Department of Energy (DOE)
Office of Energy Efficiency and Renewable Energy
Advanced Manufacturing Office (AMO)
Request for Information (RFI) DE-FOA-0001165: AMO Software Tools

DATE: July 25, 2014

SUBJECT: Request for Information (RFI) on AMO Software Tools

PURPOSE: The purpose of this RFI is to solicit feedback from industry, academia, research laboratories, government agencies, and other stakeholders on issues related to market opportunities to enhance and expand upon certain AMO system software tools and related assets. At the present time these software tool resources/assets are primarily maintained and managed by the U. S. Department of Energy's (DOE's) Advanced Manufacturing Office (AMO.) This RFI seeks information to assist with the transition of these resources to be primarily or solely managed by a third party (or parties). AMO is particularly interested in business strategies to ensure:

- The resource content is maintained, improved and enhanced
- The resources remain available to the industrial sector
- The current and future market needs for these system assets are addressed
- Adaptation to rapidly changing and progressing electronic and IT infrastructure is embraced and addressed

This is solely a request for information (RFI) and not a Funding Opportunity Announcement (FOA). AMO is not accepting applications for funding.

BACKGROUND: AMO leads national efforts to improve energy efficiency, environmental performance and overall energy productivity for the manufacturing sector. As part of DOE's Office of Energy Efficiency and Renewable Energy (EERE), AMO contributes to the organization's efforts by partnering with industry, small business, universities, and other stakeholders to identify and invest in emerging technologies with the potential to create high-quality domestic manufacturing jobs and enhance the global competitiveness of the United States. Manufacturers use AMO resources to optimize energy systems, deploy advanced technologies and integrate energy management best practices.

Since the 1990's, AMO and its partners developed and maintained a suite of energy system assets to meet needs identified by industry that were not being adequately met by the private market at the time. These resources have included software tools, accompanied by training curriculum and written technical resources. Given the burgeoning private sector energy management market and rapidly changing information technology world, AMO is seeking information as to whether third parties might be better able to assume management of these software tools in order to continue and expand their successful development, promotion, and market acceptance.

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The software tools include both a plant-level focus and a system-specific concentration, offer step-by-step ways to monitor and improve efficiency, and can be utilized by any type and size of manufacturing facility. By making these software tools available to manufacturers, AMO is able to empower these companies to make informed decisions about their equipment and systems. Inputting facility-specific data and information into these software tools allow for specialized results that manufacturers can use in their business plans and in determining how to improve their energy efficiency.

OBJECTIVE OF THIS RFI: For several decades AMO has funded the development and dissemination of software tools that can help industrial plants identify energy savings opportunities. These software tools target major energy consuming systems (e.g., steam systems, motor systems, compressed air systems, process heating systems), and are based upon strong technological models that have been refined over time. AMO is evaluating options to expand the reach and impact of these tools, including new business models that will ensure continued technological innovation while maintaining cost effective access for users of the software tools.

The objective of this Request for Information (RFI) is to solicit ideas for innovative technical and market strategies for key AMO energy system software tools that AMO has identified and believes to have significant market, and resultant energy savings potential (specific software tools identified below). AMO is seeking responses from entities, organizations or teams (i.e., “third parties”) on market strategies that would expand the dissemination, uptake, use and energy savings outcomes of the tools, including:

- innovative strategies to enhance and/or improve the technical capacity and delivery platforms for these software tools, and
- creative and effective opportunities for market development and growth.

As part of the market strategy, these third parties would assume full management authority over one or more of these software tools. Successful strategies would require demonstration of appropriate technical expertise in the software tool system area, an appropriate IT competency and an appropriate knowledge of the manufacturing energy system market opportunity. AMO is primarily interested in the responses addressing the “Key Software Tool” assets that are detailed below in the “RFI Categories and Questions” section; however, responses addressing the “Other Software Tool” assets are also encouraged.

Through this RFI, AMO is requesting ideas and solutions to position the software tool assets for effective market use. Strategies provided in response to this RFI must preserve the quality and integrity of the prior work and ensure continued attention to maintaining them. Responses should detail how they would effectively maintain, develop, improve/enhance, promote and deliver these resources including means to keep pace with evolving IT infrastructures.

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Criteria:

DOE considers the criteria listed below to be important factors in the future of the tool suite, for both the existing and any new tools developed. In developing a response to this RFI, AMO requests responses address how these elements would or could be best handled (in relative importance):

- Continue to offer software tools at no cost or low cost to the industrial end-user.
- Maintain neutrality in naming / promoting vendors, and their products and services.
- Be self-sustaining (identify the income stream to support development, maintenance and enhancement costs).
- Be kept up-to-date and in pace with advancements in industrial system technology and practices.
- Be kept up-to-date and in pace with changing information technology infrastructure and interface requirements.
- Be kept up-to-date and in pace with advances in instructional design.
- Address associated training for use of these resources at reasonable costs.
- Ensure that any new tool resource development doesn't duplicate what's already available in the commercial sector.

NOTE: Depending upon the asset, there are variations in ownership, and in some cases AMO may not be the sole owner. The response to this RFI should address how the tools that are not solely owned by AMO might be handled. This may include how best to collaborate with existing IP owners, or offer strategies to insure that the criteria listed above can be effectively met under these various ownership scenarios. See the table below (*Key Software Tools*) for the IP status of the relevant system assets to this RFI. This RFI will also consider input with regard to options or strategies (technical, financial, marketing / communications) for the identification and development of new software tools and/or related assets necessary in order to continue to meet the needs of the manufacturing sector.

REQUEST FOR INFORMATION CATEGORIES AND QUESTIONS:

AMO's software tool assets are listed below. The information below also includes a list of RFI content requirements that should be addressed in all responses.

CATEGORY 1: SOFTWARE TOOL ASSETS

Responses to the RFI should include strategies to update, maintain, expand market uptake and take ownership for future development of the identified AMO software tools as well as to identify possible new software tool resources that could or should be added to this suite. Responses can include a strategy for some or all of the tools (*key and other*). Additionally responses can suggest new tools to complement add-on to or replace any of the existing tools. The following list is considered by AMO to represent the software tools in the AMO suite, which provide the most favorable benefits to the industrial sector in terms of breadth of use and potential for energy savings, and are as such the focus of this RFI.

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Key Software Tools	
AIRMaster+ - Not solely owned by AMO	Plant Energy Profiler (PEP)
AIRMaster+Log Tool – Not solely owned by AMO	Process Heating Modeler Tool (PHMT)*
Fan System Assessment Tool (FSAT) – Not solely owned by AMO	Pumping System Assessment Tool (PSAT) – Not solely owned by AMO
MotorMaster+ - Not solely owned by AMO	Steam System Modeler Tool (SSMT)

* The release of this software tool is pending and will replace PHAST 3.0.

The software tools in the table below have been part of the AMO Energy System software tool suite over time. While these tools have not shared the same use and impact as those in the table above, responses may consider these resources as well. As with some of the tools in the above table, some of the tools below may not be solely owned by AMO.

Other Software Tools		
3E Plus	Energy Opportunity Estimator for Chemical Plants and Refineries	Process Heating Assessment and Survey Tool 3.0
Air Compressor Optimization	Flat Plate Water Heater Tool	Process Heating Scorecard
Boiler Tune-Up	Industrial Facilities Scorecard	Project Opportunities Tracker
Chilled Water Assessment Tool (CWSAT)	Mechanical Insulation Assessment and Design Calculators	Pumps Scorecard
CHP Scorecard	MotorMaster+ International	Steam Generation Equipment Scorecard
CHP Screening Tools	Notched V-Belts	Steam System Assessment Tool (SSAT)
CO2 Equivalent Emissions Calculator	NOx and Energy Assessment Tool (NxEAT)	Steam System Scoping Tool
Combined Heat and Power (CHP) Application Tool	Parabolic Trough Water Heater Tool	VSD Calculator for Fans
Compressed Air Scorecard	Photovoltaic Tool	VSD Calculator for Pumps
Daylighting Tool	Process Cooling and Refrigeration Scorecard	

Content Requirements for RFI:

In the responses to this RFI, AMO would like to understand the strategic vision behind taking over management of the software tools, including how they would be maintained and updated, how they would be delivered to the market; how they would be marketed; what would the branding look like; how industry would access them; etc.

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1. Given some of the tools are not updated or on the most accessible platform, AMO would like to see RFI responses include effective options or strategies for making the necessary revisions to the software tools, including which tasks or activities would need to take place. AMO wishes to understand how these updates would be part of a larger energy system software tool strategy and how the software tools will be adequately resourced.
2. AMO would like to see recommendations for effective distribution/deployment of these tools. This might include, what steps can be taken to make sure these software tools are at the level of use and market acceptance relative to the market demand. AMO would also like to understand what would be the estimated cost to the industrial user, as well as the perceived vehicle for generating an income stream.
3. What is your vision of AMO's continued participation? What role would you recommend that AMO take during a transition of the software tools from AMO to one or more third parties? Describe any level of support necessary from DOE during and after the transition. Would there continue to be an AMO affiliation?
4. DOE recognizes that there are other resources in the AMO system asset suite, (specifically training curriculum and online training resources, certifications, and publications) related to these software tools. Responses may focus solely on the software tools or may include or leverage these other system assets in a business model / strategic plan.
5. What do you estimate the timeline to be for making the necessary changes and updates to fully deploy these software tools as private versus public resources on current and working IT platforms? What would a timeline and estimated schedule look like?

REQUEST FOR INFORMATION RESPONSE GUIDELINES: Responses to this RFI must be submitted electronically to AMOTools@go.doe.gov, no later than 5:00pm (EDT) on September 30, 2014. Responses must be provided as attachments to an email. It is recommended that attachments with file sizes exceeding 25MB be compressed (i.e., zipped) to ensure message delivery. Only electronic responses will be accepted.

Please identify your answers by responding to a specific question or topic if possible. Respondents may answer as many or as few questions as they wish.

EERE will not respond to individual submissions or publish publicly a compendium of responses. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed.

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Respondents are requested to provide the following information at the start of their response to this RFI:

- Company / institution name;
- Company / institution contact;
- Contact's address, phone number, and e-mail address.

DISCLAIMER AND IMPORTANT NOTES: This RFI is not a Funding Opportunity Announcement (FOA); therefore, EERE is not accepting applications at this time. EERE may issue a FOA in the future based on or related to the content and responses to this RFI; however, EERE may also elect not to issue a FOA. There is no guarantee that a FOA will be issued as a result of this RFI. Responding to this RFI does not provide any advantage or disadvantage to potential applicants if EERE chooses to issue a FOA regarding the subject matter. Final details, including the anticipated award size, quantity, and timing of EERE funded awards, will be subject to Congressional appropriations and direction.

Any information obtained as a result of this RFI is intended to be used by the Government on a non-attribution basis for planning and strategy development; this RFI does not constitute a formal solicitation for proposals or abstracts. Your response to this notice will be treated as information only. EERE will review and consider all responses in its formulation of program strategies for the identified materials of interest that are the subject of this request. EERE will not provide reimbursement for costs incurred in responding to this RFI. Respondents are advised that EERE is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI. Responses to this RFI do not bind EERE to any further actions related to this topic.

PROPRIETARY INFORMATION: Because information received in response to this RFI may be used to structure future programs and FOAs and/or otherwise be made available to the public, **respondents are strongly advised to NOT include any information in their responses that might be considered business sensitive, proprietary, or otherwise confidential.** If, however, a respondent chooses to submit business sensitive, proprietary, or otherwise confidential information, it must be clearly and conspicuously marked as such in the response.

Responses containing confidential, proprietary, or privileged information must be conspicuously marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The U.S. Federal Government is not liable for the disclosure or use of unmarked information, and may use or disclose such information for any purpose.

If your response contains confidential, proprietary, or privileged information, you must include a cover sheet marked as follows identifying the specific pages containing confidential, proprietary, or privileged information:

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Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this response may contain confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for the purposes described in this RFI DE-FOA-0001165. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

In addition, (1) the header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: “Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure” and (2) every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting.

EVALUATION AND ADMINISTRATION BY FEDERAL AND NON-FEDERAL

PERSONNEL: Federal employees are subject to the non-disclosure requirements of a criminal statute, the Trade Secrets Act, 18 USC 1905. The Government may seek the advice of qualified non-Federal personnel. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The respondents, by submitting their response, consent to EERE providing their response to non-Federal parties. Non-Federal parties given access to responses must be subject to an appropriate obligation of confidentiality prior to being given the access. Submissions may be reviewed by support contractors and private consultants.

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