



**Innovation in the Manufacturing of Clean Energy Technologies
Program Opportunity Notice (PON) 2414
\$2.5 Million Available**

This PON is NOT limited to facilities that pay the SBC

Proposals Due*:

Round 1 - May 9, 2012 by 5:00pm Eastern Time,

Round 2 - September 26, 2012 by 5:00pm Eastern Time

All, or none, of the available funds could be allocated to projects selected from any one due date.

The New York State Energy Research and Development Authority (NYSERDA) invites proposals for projects that research, develop, demonstrate or commercialize **an innovative energy-efficient manufacturing process for a Clean Energy Technology¹ in New York State.**

NYSERDA anticipates making multiple awards in the following categories:

Category A: Manufacturing Process Development for a new clean energy technology

Category B: Manufacturing Process Improvement of an existing manufacturing process of a clean energy technology

Category C: Technology Development of an innovative manufacturing technology that will provide an energy benefit for the manufacturing process of a clean energy technology

Category D: Feasibility Study of a project that would fall under Category A, B, or C.

For Categories A, B, & C NYSERDA will provide up to \$400,000, or 50% of the total project cost, whichever is less. Such process/technology development or process improvement projects typically include: field demonstrations at industrial sites in NY, performance testing, manufacturability analysis, commercial design development, certification, development of production systems, or development of commercialization strategies.

For Category D NYSERDA will provide up to \$100,000, or 50% of the total project cost, whichever is less. Feasibility Studies include: proof-of-concept investigations, and prototype design and development.

Proposers must submit one (1) electronic copy of the proposal on a standard compact disk and four (4) paper copies of the proposal with a completed and signed proposal checklist attached to the front of each copy, one of which must contain an original signature. The electronic copy must include all components of the paper copy, including all relevant forms and signatures. Proposals must be clearly labeled and submitted to:

Roseanne Viscusi, PON 2414
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

For technical questions for PON 2414, contact one of the following Project Managers at (518) 862-1090, at the designated extension, or email: Ashley Cox, ext. 3448, adc@nyserda.org and Miriam Pye, ext. 3370, mep@nyserda.org.

For contractual questions for PON 2414, contact Nancy Marucci, ext. 3335, nsm@nyserda.org.

No communication intended to influence this procurement is permitted except by contacting the Project Managers listed above (Designated Contacts). Contacting anyone other than these Designated Contacts (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

** Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist will be returned. Faxed or emailed proposals will not be accepted. Proposals will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at www.nyserda.ny.gov.*

¹ Clean Energy Technology is defined as technologies that have been successfully demonstrated to reduce energy-related environmental impacts substantially and relevant subcomponents in their supply chain, including: (1) technologies that generate or support the generation of energy; (2) end-use technologies; (3) energy storage technologies; and (4) transmission and distribution technologies.

I. Program Overview

PON 2414 seeks proposals that research, develop, demonstrate or commercialize an energy efficient manufacturing process for a Clean Energy Technology in New York State.

The intent of PON 2414 is to help New York State manufacturers of clean energy technologies to (1) use less energy to manufacture their product, and (2) enhance the viability of the clean energy tech sector in NYS. NYSERDA encourages the use of systematic techniques (such as biomimicry), where applicable, to minimize the risks associated with developing new technologies.

NYSERDA has three programs that help support NYS manufacturers, carefully consider the following table when determining if the proposed project should be proposed under:

- PON 2414 – Innovation in the Manufacturing of Clean Energy Technologies (IMCET)
- PON 2415 – The Manufacturing Readiness Program (MRP), or
- PON 1219 – Existing Facilities Program (EFP)

To help guide which program may be right for your project, below you will find a table that lays out the differences in program requirements.

Program	Manufacturer of Clean Energy Technology	Project Must be Innovative	Project must result in Energy Efficiency of the Manufacturing Process	Project must result in a Direct Reduction of Cost of Goods Sold
PON 2414 – IMCET	X	X	X	
PON 2415 - MRP	X	X		X
PON 1219 - EFP			X	

If you have questions about whether your project meets the basic criteria of PON 2414, please contact Ashley Cox, ext. 3448, adc@nyserda.org or Miriam Pye, ext. 3370, mep@nyserda.org.

II. Program Requirements

Project Categories – Four categories of projects will be considered for funding.

Category A: Manufacturing Process Development

Category A seeks proposals that develop the initial manufacturing process of a new clean energy technology. The project must result in a functioning manufacturing process of a clean energy technology located within New York State. NYSERDA will provide up to \$400,000, or 50% of the total project cost, whichever is less.

Category B: Manufacturing Process Improvement

Category B seeks proposals that demonstrate a process improvement of an existing manufacturing process for a clean energy technology. The project must result in actual on-site energy savings through innovative improvements on the existing manufacturing process. NYSERDA will provide up to \$400,000, or 50% of the total project cost, whichever is less.

Category C: Technology Development

Category C seeks proposals that develop, demonstrate, or commercialize an innovative manufacturing machine tool (e.g. assembly or testing equipment) that will provide an energy benefit to a clean energy technology manufacturing process. Proposers for Category C must have a strong link to the clean energy sector and must partner with a clean energy technology manufacturer that would be a candidate for using the to-be developed manufacturing technology. NYSERDA will provide up to \$400,000, or 50% of the total project cost, whichever is less.

Category D: Feasibility Study

Category D seeks feasibility studies for a project that would fall under Categories A, B, or C. Projects can include: proof-of-concept investigations, or prototype design and development. NYSERDA will provide up to \$100,000, or 50% of the total project cost, whichever is less.

III. Proposal Requirements

- Proposers must submit one (1) electronic copy of the proposal on a standard compact disk and four (4) double-sided paper copies of the proposal. The electronic copy must be in pdf format and must include all components of the paper copy, including all relevant forms and signatures. Proposals must be clearly labeled and submitted to R. Viscusi at the address indicated on the first page of this PON.
- Bindings, report covers, or other presentation materials should not be used (a single staple in the upper left-hand corner is preferred).
- A Complete Proposal consists of:
 - Attachment A: Proposal Checklist (one of which must contain an original signature),
 - Attachment A-1: Acceptance of Standard Terms and Conditions,
 - Attachment B: Disclosure of Prior Findings of Non-responsibility Form,
 - Attachment C: Program Proposal Narrative ,
 - Attachment D: Contract Pricing Proposal Form, and
 - Attachment E: Solicitation Marketing Questionnaire
- Do not include unnecessary attachments beyond those sufficient to present a complete and effective response.
- Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist will be returned.
- Faxed or e-mailed copies will not be accepted.

Procurement Lobbying Requirements – State Finance Law sections 139-j and 139-k: Procurement lobbying requirements contained in State Finance Law sections 139-j and 139-k became effective on January 1, 2006. (Text of the laws is available at: <http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>). In compliance with §139- j and §139-k of the State Finance Law, for proposals submitted in response to this solicitation that could result in agreements with an annual estimated value in excess of \$15,000, additional forms must be completed and filed with proposals: (1) a signed copy of the Proposal Checklist including required certifications under the State Finance Law and (2) a completed Disclosure of Prior Findings of Non-Responsibility form. Failure to include a signed copy of the Proposal Checklist referenced in this solicitation will disqualify your proposal.

IV. Proposal Narrative

Complete the attached Proposal Narrative; the Narrative must have all questions/sections answered, if not, the proposal will be deemed unresponsive and will be returned. Please refer to the instructions within the Narrative and the Evaluation Criteria below for guidance.

V. Evaluation Criteria

The Technical Evaluation Panel will use the evaluation criteria below for the review of each Completed Proposal.

1. Executive Summary

- Does the executive summary provide a clear and concise summation of the proposed project?

2. Project Category

- Did the proposer correctly categorize their project?

3. Link to Clean Energy Technology

What clean energy technology is receiving the manufacturing process improvement/development?

- Does this project involve a clean energy technology?
- Does the manufacturer of the clean energy technology have a significant role in the project?

4. Problem Statement

Clearly State what the manufacturing problem or opportunity being addressed is.

- Is the problem described clearly?
- Does the proposed project provide significant energy benefits?

5. Proposed Solution

What is the solution to the manufacturing problem or opportunity listed above?

- Is the solution described clearly?
- Is the concept practical and technically feasible?

Why is the solution innovative?

- Is the technology/application innovative (not currently used in New York State for the type of application proposed)?

What is the current stage of research/development/commercialization of the solution?

- Is the solution going to reach commercialization within the next 5 years?

What are the alternative solutions and why is this one superior?

- Is the proposed technology better than other options?
- Has the Project Team considered all the alternatives?

What are the barriers to success and risks of this project?

- Is the Project Team aware of potential hurdles?
- Does the Project Team have a sound plan for dealing with hurdles?

6. Project Benefits

What are the estimated annual energy benefits of the project (e.g. kWh, kW, Btu)?

- Are energy benefits significant?
- Do the estimates of the benefits seem reasonable?
- Were assumptions used in estimating benefits clearly specified?

What are the estimated annual non-energy benefits (e.g. productivity gains, job creation, operating savings, etc.)?

- Are the environmental and economic benefits significant for the proposer?
- Do the estimates of the benefits seem reasonable?

Quantify the benefits to New York State and estimate replicability.

- Are the benefits significant to New York State?
- Is there a high potential for replication across New York State?

How were the benefits calculated? Please state your assumptions.

- Were the assumptions stated clearly?
- Do the assumptions seem reasonable?

What entities will reap the benefits of the proposed project?

- Are the entities located in New York State?

Upon conclusion of the project, benefits must be quantified and reported to NYSERDA. Discuss your plan for quantifying the **actual** project benefits.

- Is there a sound plan to establish baseline data?
- Is there a sound plan to collect annual energy and non-energy metrics?

7. Information Dissemination/Commercialization

Projects under Category A (that do not plan on licensing their manufacturing process) and Category B, will be asked to answer the following questions related to Information Dissemination.

Who are the other potential users for this process improvement?

- What is the potential for replication?

How do you plan on disseminating the project results to the audience above (e.g., on-site public demonstrations, presentations at appropriate meetings, preparation of fact sheets, articles or case studies, etc.)?

- Is the Proposer's plan adequate to disseminate appropriate information to the appropriate New York State audience?

Projects under Category A (that plan on licensing their manufacturing process) and Category C, will be asked to answer the following questions related to Commercialization.

Define your target market and their relevant characteristics.

- Is there a market demand for this product/process?
- Does the proposer show adequate knowledge of the market?

Discuss your marketing strategy and why you think it will be successful.

- Does the proposed market strategy seem effective?
- How likely is it that this product/process will be commercially viable in 3 years or less?

Discuss the cost/benefit advantage of your product/process over your competitors.

- Is the cost/benefit ratio favorable?
- Does the proposer use a sound cost/benefit analysis?
- Is there a potential for greater benefit than the competitors?

Discuss technical development steps remaining prior to starting manufacturing or deployment.

- Will the successful completion of the proposed project provide significant momentum in the commercialization of the product/process?
- Do the remaining steps seem adequate?
- Do the remaining steps still involve significant technical risk?

Discuss plans for setting up facilities for manufacturing or other deployment activities, including key issues such as: need for specialized production equipment or strategic alliances; critical make/buy decisions or cost/volume issues; and plans for ancillary activities such as service support functions.

- Does the manufacturing/deployment plan seem reasonable?
- Does the proposer show a good understanding of the issues they may face?

Discuss your financial plan to get from the current stage of development to a financially self-sustaining level of commercialization. Identify potential funding sources and strategic partners.

- Is funding adequate to achieve commercialization?
- Does the plan involve significant reliance on governmental grants or private investment?

8. Scope of Work

- Does the scope of work provide enough detail to understand what will happen in each task?
- Is the approach likely to meet the proposal's goals?
- Is the schedule reasonable?
- Does the statement of work include tasks for Information Dissemination/Commercialization?
- Does the statement of work include a plan to quantify the baseline and actual benefits after project completion?

9. Cost Sharing

- Does the cost share meet or exceed the 50% total project cost requirement?
- If applicable, is the project site providing cost sharing?
- If applicable, are all members of the project team providing cost sharing?

10. Budget

- Is cost reasonable when measured against project goal, scope of work, and expected benefits?
- Are costs clearly specified?

11. Business Description

Describe your business: number of employees; what you produce and how much per year, or what services you provide; what kind of facilities you have; how many locations you have, whether you are part of a larger organization, and total revenues for 2011.

- Does the proposer have the resources to complete the proposed project?

Discuss how much of your revenues resulted from sales, grants and other sources (identify).

- Is the business financially sound?

Identify any investments from, or discussions with, venture capital firms, investment bankers, etc.

- Has the proposer seen any interest from private investors?

If your proposed project involves additional demonstration sites, identify the site(s) (location, facilities, product, employees, revenues, etc.).

- Do the additional demonstration sites have the resources to complete the proposed project?

12. Project Team

List team members, including the project manager, subcontractors, other participants and cofunders involved in the project. Explain their roles and responsibilities.

- Are the roles and responsibilities clearly defined?
- Do the roles and responsibilities seem appropriate?

Describe qualifications and relevant experience or expertise.

- Does the project team have the qualifications and resources needed to succeed?

For Category C Technology Development projects, who is the potential end user who manufactures a Clean Energy Technology that is a part of the Project Team?

- Does the project team include a company in New York State that manufactures a Clean Energy Technology?
- How involved is the Clean Energy Technology Manufacturer in the proposed project?

13. Letters of Commitment or Support

- If applicable, do letters of support exist and do they reflect the level of involvement (e.g., co-funding, potential interest in buying product, services, etc.) from the supporter(s)/potential customer(s)/ partner(s)?

OTHER CONSIDERATIONS

Proposals will be reviewed to determine if they reflect NYSERDA’s overall objectives, including: risk vs. reward relationships, potential for complementing similar ongoing or completed projects, the general distribution of NYSERDA projects among organizations, and the distribution of projects within New York State.

GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position

of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to accept it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <http://nyscrda.ny.gov/~media/Files/About/Contact/NYSERDARegulations.ashx>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements. Information on the availability of New York subcontractors and suppliers is available from: Empire State Development, Division for Small Business, 30 South Pearl Street, Albany, NY 12245. A directory of certified minority- and women-owned business enterprises is available from: Empire State Development, Minority and Women's Business Development Division, 30 South Pearl Street, Albany, NY 12245.

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at <http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>

The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See*, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSERDA. *See*, ST-220-CA (available at http://www.tax.ny.gov/pdf/2006/fillin/st/st220ca_606_fill_in.pdf). The Department has developed guidance for contractors which is available at <http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA, at its soles discretion, will decide whether to contract successful projects using time and material or milestone payment terms. NYSERDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal. NYSERDA expects to notify proposers in approximately 10 weeks from the proposal due date whether your proposal has been selected to receive an award. **NYSERDA may decline to contract with awardees who are delinquent with respect to any obligation under any previous or active NYSERDA agreement.**

Recoupment - For any new product development projects requesting NYSERDA funding over \$50,000, NYSERDA will require a royalty based on sales of the new product developed. For feasibility studies over \$50,000 involving Product Development activities, if subsequent funds are awarded for a commercialization effort, at NYSERDA's discretion the contract for the commercialization phase may include a provision for recoupment of the feasibility study funds in addition to a provision for recoupment of the commercialization phase funds. NYSERDA's standard royalty terms are 1.5% of sales for products produced in New York State (for a period of fifteen years or until the Contractor pays NYSERDA an amount equal to the amount of funds paid by NYSERDA to the Contractor, whichever comes first) and 5% of sales for products produced outside of New York State (for a period of fifteen years or until the Contractor pays NYSERDA an amount equal to three times the amount of funds paid by NYSERDA to the Contractor, whichever comes first).

Annual Metrics Reports - On an annual basis, the Contractor shall submit, to NYSERDA's Project Manager, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract was executed. Reports shall be submitted by January 31st for the previous calendar years activities (i.e. reporting period). Please see Attachment F: Sample Metrics Reporting Guides for the metrics that you

will be expected to provide and the reporting duration. **NYSERDA may decline to contract with awardees who are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.**

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Attachments

- Attachment A: Proposal Checklist
- Attachment A-1: Acceptance of Standard Terms and Conditions
- Attachment B: Disclosure of Prior Findings of Non-responsibility Form
- Attachment C: Program Proposal Narrative
- Attachment D: Contract Pricing Proposal Form
- Attachment E: Solicitation Marketing Questionnaire
- Attachment F: Sample Agreement (Not included in proposal submission)
- Attachment G: Sample Metrics Reporting Guides (Not included in proposal submission)