NYS Clean Energy Technologies Innovation Metrics
Request for Proposal RFP2266
$ 400,000

Proposals Due: December 12, 2011 by 5:00 PM Eastern Time*

Program Summary
New York currently lacks a defined method to gauge and report on the level of clean technologies (CT) innovation, entrepreneurial activity, and business growth that exists in the State. This lack of information makes it difficult for a clean technology business to decide to start up, expand, or locate in New York.

This Request for Proposal seeks proposals to develop and publish a suite of indicators that accurately defines the level of CT innovation activity that is in place in New York, and which provides information to attract and promote clean technology business to business-owners, entrepreneurs, investors, and others thinking of investing or doing business in New York State. The indicators would track the progress and health of the clean energy economy in New York State, to further two objectives. Publication of these indicators on a periodic basis fills an identified information gap that is believed to hamper consideration of New York as a place for clean technology companies to grow their businesses.

Proposers will determine those metrics that business-owners entrepreneurs, investors, and others look at to identify clean technology business opportunities in New York State.

The contractor would be required to:
1) Propose metrics relevant to clean technology innovation, business growth, and workforce capacity and expertise.
2) Convene a focus group to help select initial metrics.
3) Collect and gather data specific to clean technology innovation in New York State.
4) Analyze and compare data to other states.
5) Publicize the results.

Proposal Submission
Proposers must submit two (2) electronic copies of the proposal on a standard compact disk (CD) and two (2) paper copies of the proposal with a completed and signed Proposal Checklist and the Disclosure of Prior Findings Form completed and signed with original signatures attached to the front of each copy. The electronic copy of the proposal must be the exact scanned image of the paper copy in .pdf format, including all relevant forms and signatures. Additional files on the CD should include: financial information (CPPF) and the Project Summary, which must be in MS Excel or MS Word format as appropriate. Proposals must be clearly labeled and submitted to:

Roseanne Viscusi, RFP 2266
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

If you have technical questions concerning this solicitation, contact the project manager, Jacques Roeth at (518) 862-1090, ext.3301 or jr3@nyserda.org. If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 or nsm@nyserda.org.

No communication intended to influence this procurement is permitted except by contacting the project manager listed above. Contacting anyone other than this Designated Contact (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 may be returned. Faxed or e-mailed 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 web site at www.nyserda.org.

I. Introduction

Business Case:
An understanding of the environment of innovation & business growth by New York State entrepreneurs is critical to fostering the growth of a clean technologies (CT) industry, and the growth of CT jobs, in NYS. Other states, such as California and Michigan, have begun to collect information on their clean technology economies, and report their state progress on a periodic basis. Their published reports provide a window into the state of their economies, and many of the metrics that they are able to gather – patents, venture investment, manufacturing employment, etc. – provide a level of understanding of progress in the CT sector that helps to foster informed investment decision-making. Demonstrating the level of activity in clean technology industries in New York will provide an equal level of information to the venture and capital communities not previously available in New York. Developing and circulating this information is anticipated to improve the understanding of the investment opportunities in New York, and may also improve customers' product choice and availability as well as bring product improvements for clean tech products and services.

The existing and prospective programs in NYSERDA's Innovation and Business Development group are aimed not only at supporting individual clean technology companies but also fostering a supportive environment for innovation, entrepreneurship and technology-led business growth. The Clean Energy Business Incubators, for example, provide direct support to individual clients and tenants, and the impacts on those clients can be measured in terms of indicators such as private investments leveraged, jobs created, new products introduced, etc. The incubators also provide entrepreneurial training, outreach to local business and academic communities, and numerous events to promote entrepreneurship and networking. These activities help to promote the interests of their clients, and they also are intended to spur innovation and entrepreneurship within the community. These latter effects are at present difficult to measure, as are the economic impacts they may have.

NYSERDA convened a Business Development Program Roundtable at the Tech Garden in Syracuse on July 15, 2010 to gather views on the Authority's current, planned, and possible new programs to foster innovation, entrepreneurship and growth in New York's clean technology sector. In attendance were some 25 venture capital investors, clean technology entrepreneurs, incubator directors, and university technology transfer officers. A clear consensus of this group was that although there is a credible amount of entrepreneurial activity within the clean technology industry in New York State, very little of it is seen beyond state borders. As a result investors and entrepreneurs do not commonly look at New York as a place to invest or expand a business. One recommendation was that NYSERDA take a greater role in increasing the visibility of the activity and opportunity for investment in the New York CT industry.

Problem Statement: Determine those metrics that business-owners, entrepreneurs, investors, and others look at to assess clean technology business opportunity in New York State. Lacking is a clear method to gauge level of clean technologies (CT) innovation, entrepreneurial activity and business growth exists for New York State. This lack of information makes it more difficult for a clean technology business to decide to start up, expand, or locate in New York.

Program Objectives: This program is to develop and publish a suite of indicators that can track the progress and health of the clean technology economy in New York State, to further two objectives. First, publication of these indicators on a periodic basis fills an identified information gap that is believed to hamper consideration of New York as a place for clean technology companies to grow their businesses. Second, the NYSERDA and others can use this information to gauge program effectiveness and uncover program needs over time.

II. Program Requirements

Program Eligibility and Proposer Qualifications

For-profit and not-for-profit entities may propose under this solicitation. Proposal teams should demonstrate a minimum of two years experience in researching, analyzing, and delivering metrics information or comparable experience. The formation of proposal teams is allowed provided that there is a single lead proposing entity that will be accountable for program delivery.

Scope of Services

The contractor would be required to:

1) Propose metrics relevant to clean technology innovation, business growth, and workforce development.
    a. Proposed metrics should include (at a minimum) indicators in the following Clean Economy Categories (see examples in Table 1):
        1. Renewable Energy
        2. Energy and Resource Efficiency
    b. Metrics should cover multiple areas,, for example:
        1. Economic Impact
        2. Research
        3. Technology Development
        4. Business Development
        5. Capital
        6. Human Resources

2) Convene a focus group to help select initial metrics deemed to be representative of the goals.

3) Collect and gather data specific to clean technology economy in New York State.

4) Evaluate metrics for relevancy, utility, specificity, etc. as related to the goals and against other states.

5) Create materials to broadly publicize this information throughout New York State, nearby states and even nationwide. Any information produced by this effort will be published and NYSERDA branded.

Examples of similar benchmark studies measuring innovation, green or clean tech have been performed for California, Massachusetts and Michigan for several years (see Section VII). These track progress of various metrics to show innovation or clean tech business growth.

The metrics may be used in the development of the Draft 2013 State Energy Plan, which is due September 1, 2012. Having metrics in the first quarter of 2012 would facilitate their inclusion in the Growing the Clean Energy Economy section, which will discuss the State's economic development, clean technology innovation and development, employee development and educational initiatives and policies.

Available Funds

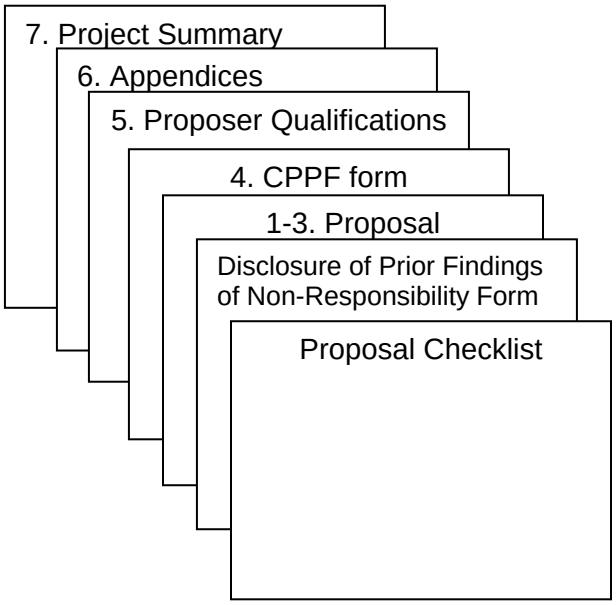
NYSERDA will make available up to $200,000 as one award under this solicitation. The period of performance shall be for one year with an option to renew for two years after. Each year of renewal can be up to $100,000. Benefit delivered versus cost proposed will be an evaluation criterion.

III. Proposal Requirements

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics – double-sided prints with a staple in the upper left corner is the preferred format. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the PON number, and the page number. Printouts of web pages are not recommended. The proposal should present the items in this sequence:

- Proposal Checklist (**Attachment A,** signed & dated) – *NOTE: Project title is a title chosen by the proposer that is descriptive of the proposal. It is not the title of this PON.*
- Disclosure of Prior Findings of Non-Responsibility Form (**Attachment B**, signed & dated) *See Procurement Lobbying Requirements below*
- Proposal Sections:
  1. Executive Summary
  2. Business Case, Problem Statement, Goals
  3. Description of Proposed Project
     - 3.1. Propose metrics relevant to clean technology innovation, business growth, and employee development.
     - 3.2. Convene a focus group to help select initial metrics.
     - 3.3. Collect and gather data specific to clean technology innovation in NYS.
     - 3.4. Analyze data.
     - 3.5. Publicize information
  4. Contract Pricing and Proposal Form (**Attachment C**)
  5. Proposer Qualifications and Experience
  6. Appendices
  7. Project Summary (**Attachment E)**

Do NOT include copies of Attachment D – Sample Agreement with Exhibits B, C, D



Proposers must submit one (1) electronic copy of the proposal on a standard compact disk (CD) and two (2) paper copies of the proposal to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice. A completed and signed Proposal Checklist and the Disclosure of Prior Findings Form completed and signed with original signatures attached to the front of each copy. The electronic copy of the proposal must be the exact scanned image of the paper copy in .pdf format, including all relevant forms and signatures. Additional files on the CD should include: financial information which must be in MS Excel or MS Word format as appropriate. **Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist may not be considered as compliant with this solicitation.** Faxed or emailed 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. (The text of the laws are available at: http://www.ogs.state.ny.us/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 Sections

1. Executive Summary (1-2 pages)

Briefly summarize the proposal by highlighting the overall process and schedule that proposer will undertake.

2. Business Case, Problem Statement, Goals (2-5 pages)

Describe the background and rationale for the proposed project to provide a context for the proposed activities.

- What is the business case for the proposed project?
- What is the problem the proposer will address with this project?
- What specific goals does the proposer plan to achieve?
- How will outcomes be measured?

3. Description of Proposed Project

Describe your approach to researching needs, involving stakeholders, defining the program sessions and conducting the overall executive program. For this section, proposer should show how they would implement this project by developing a statement of work (SOW) that consists of a list of tasks, along with a description, budget and schedule for the performance of each.

The Statement of Work (SOW) is the primary contractual document that outlines work activities and quantifies deliverables. It specifically delineates each step or procedure required to accomplish the project objectives.

Therefore, each action needs to be identified, indicating who will perform it, how it will be performed and its intended result. At the end of each task description, specific task deliverable(s) must be listed. Be clear and specific: concentrate on "how" and not "why." Use "active voice" sentence structure to make clear who is responsible for specific actions; for example, use the following phrase to start the description of every task and subtask: "The Contractor shall...." Together, these tasks should address the following items, within the limitations of the program budget:

Discuss plan for Project Management (Task 0)

- Describe how program progress and results will be communicated to NYSERDA.
- Discuss relationship with collaborating organizations.
- How will you manage, schedule, coordinate, etc.

Propose Metrics (Task 1)

Propose metrics relevant to clean technology innovation, business growth, and employee development in each of three categories and six topic areas for a minimum total of 18. Proposed metrics should measure various points along the technology development/business cycle (from creation of idea through large-scale manufacturing to design and installation). Prioritize the list of metrics by ease of implementation with a subjective ranking from 1-5 (1-easy to implement).

- Propose metrics in the following Clean Economy Categories (see examples in Table 1):
  - Renewable Energy
  - Energy and Resource Efficiency
- Metrics should cover multiple areas:
  - Economic Impact
  - Research
  - Technology Development
  - Business Development (may include support services, service providers and consultants)
  - Capital (e.g. business growth, project finances)
  - Human Resources (e.g. training,higher ed)
- Provide support on why metrics would be of interest to a potential business, investor or employee considering entering NYS.
- Cite references and methodologies for metrics chosen to support sourcing of metrics. **Metrics should be non-proprietary.**
- Discuss how the chosen metrics drive changes to NYS renewable energy usage and/or energy efficiency improvements and emissions reductions.
- These proposed metrics will not be final but are intended see that the proposer has a grasp on the appropriate metrics. ***NYSERDA reserves the right to use any metric for the project including those by any proposer including proposals not awarded a contract under this solicitation.***

Present plan to Select Focus Group to establish metrics (Task 2)

Convene a focus group which might include government business development, research institutions and business community to help select initial metrics deemed to be representative. Plan to hold an annual review of metrics by focus group to discuss needed changes to metrics.

- In collaboration with NYSERDA, facilitate a focus group to vet proposed indicators prior to commencing work.
- Identify target audience and get them to articulate which metrics would be most useful.
- Discuss how focus groups will be selected and implemented
- What method & criteria will be used to assess metrics for studying?
- Hold an annual review of report and metrics with focus group to discuss needed changes to metrics.

Present plan to Collect data Sources (Task 3)

Collect and gather data specific to clean technology innovation in NYS.

- Cite sources and methodologies used where applicable
- Source and methodologies must be widely recognized, endurable, accurate and accepted by a peer review of the business community as valid and meaningful
- Show metrics with positive implications as well as areas of needed improvement.

Present plan to Analyze Metrics (Task 4)

Evaluate data to create meaningful and useful results.

- Explain implications that analysis of the data reveals.
- Explain why the chosen metrics are important. Explain why audience should pay attention to the metric.
- Explain implications that analysis of the data reveals.
- Discuss drivers of metrics or factors that impact changes in the metrics.
- Provide methods to compare or rank key metrics data to other states. Are metrics consistent with other states?

Present plan to Publicize (Task 5)

Present the results to a wide audience not only within NY State but that may attract other to look at NY State. This might include an annual report, summary presentation, infographics, webinars conference papers, etc

- Who is the target market?
- How will you reach the target market with the results of this project?
- This may include but is not limited to:
  - Annual report
  - Summary presentation
  - Webinar(s) to present study findings
- Infographic (single sheet summary mostly graphic)

4. Proposal Financials *(2-4 pages)*

Contract Pricing and Proposal Form The CPPF - (see **Attachment C**) summarizes the total costs (*all years)* presented in section *Course Economics* above but broken down into 10 Cost Elements. Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

1. Cost elements for overhead include items or accounts that <u>directly</u> support the work being proposed.

2. Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).

3. If the rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.

4. If rate(s) is based on estimated costs or prior period actual results, include calculations to support the proposed rate(s). The calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustments for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

5. Proposer Qualifications and Experience *(4-8 pages)*

Describe the lead proposer or proposing organization and its role. Describe projects, initiatives and ongoing programs of the proposing team and its history of work similar to this request. Describe any other relevant experience.

Describe partner or supporting organizations, if any, and their respective roles each as they relate to this proposed program. Provide letters of commitment from these organizations in the appendix.

Identify key personnel who will be responsible for implementing the program and provide brief biographical information. Provide full resumes in the appendix.

6. **Appendices**

- ***Potential Conflicts of Interest –*** Identify the nature of any potential conflicts of interest among team members in providing services to NYSERDA under this PON. Fully discuss possible conflicts of interest, actual and perceived, which could arise in connection with performance by team members of the proposed contract. Describe how your firm would resolve conflicts of interest. In the event that NYSERDA determines that a team member may have a conflict of interest or the appearance of such, NYSERDA may: (1) take this into consideration in evaluating the proposal; (2) exclude the proposer from consideration for an award; (3) adjust the scope of work to avoid the conflict of or appearance of conflict; or (4) negotiate other appropriate actions with the team member to avoid the conflict or appearance of conflict.

- ***Exceptions to the Terms and Conditions -*** If you do not accept the Standard Terms and Conditions as contained in the attached Sample Agreement (**Attachment D**), provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State.

- ***Letters of Commitment or Support -*** If you are relying on any other organization or business to do some of the work, provide services or equipment, or share in any non-NYSERDA cost, include a letter from that organization or business describing its commitment. Also include letters of commitment or support from businesses or organizations critical to the future implementation of the project. **Absence of letters of commitment or support will be interpreted as the proposer not having commitment or support from those parties**.

- ***Resumes or C.V.s of Key Individuals of all participants that will be participating in project***

7. **Project Summary**

Complete the one-page summary in Attachment E and attach as last page of proposal

V. Proposal Evaluation

Proposers must meet eligibility requirements. Required forms, tables, certifications and signatures must be provided by the proposal due date. Proposals that meet Proposal requirements will be reviewed by a Technical Evaluation Panel (TEP). There can only be one winner for this solicitation.

Proposals will be ranked against one another according to the following criteria:

Evaluation criteria

Proper and Complete Documentation

- Is the Application Package complete?

Budget and Costs

- Has the proposer submitted complete budget details?
- Are the financials clearly disclosed and explained?
- Do the proposed project economics show a good value for the proposed cost?

Scope of Work

- Does the proposer understand the project goals based on their initial proposed metrics?
- Has the proposer presented clear support for usefulness of their proposed metrics?
- Is the proposer's plan to select, implement a focus group sound?
- Has the proposer presented a reasonable method to select the correct metrics?
- Has the proposer laid out a clear plan to collect data?
- Are the sources and methodologies presented to collect data reasonable, widely acceptable and universal?
- Does the proposal represent a clear plan to evaluate data to create meaningful and useful results?
- How will the proposal handle comparison with other states or similar reports?
- How well does the proposer discuss metrics as identifying drivers of change for renewable energy, energy efficiency and emissions reductions?
- How will proposer reach stakeholders with project results?
- Is proposer's plan to publicize reasonable?

Schedule, Tracking, Monitoring, Metrics

- Is the proposer's project schedule practical for the work proposed?
- Are adequate program tracking metrics and reporting mechanisms in place to ensure that the program is achieving specified outcomes?
- Are the results specific, measurable, attainable, realistic and timely?

Proposer Qualifications

- How available, qualified, and experienced are the key team members including collaborating partners?
- How experienced and accomplished are the key team members?
- How clearly organized is the team, including partner organizations? How appropriate is the organizational structure for the accomplishment of the program objectives?
- How good is the track record of the proposing team members in performing on NYSERDA contracts, if applicable?
- Is the organization qualified to deliver the initiative?
- Include Letters of intent or support from proposer's collaborative partners

VI. 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 New York State 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 exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 www.nyserda.org/about/nyserda.regulations.pdf. 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.state.ny.us/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.state.ny.us/pdf/2007/fillin/st/st220td_507_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.state.ny.us/pdf/2006/fillin/st/st220ca_606_fill_in.pdf). The Department has developed guidance for contractors which is available at http://www.tax.state.ny.us/pdf/publications/sales/pub223.pdf.

Contract Award - NYSERDA anticipates making one award 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 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.

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.

VII. Attachments:

Attachment A – Proposal Checklist
Attachment B – Disclosure of Prior Findings of Non- Responsibility
Attachment C – Contract Pricing and Proposal Form (CPPF) Instructions and Form
Attachment D – Sample Agreement with Exhibits B, C, D
Attachment E – One-Page Project Summary

VIII. References

- Brookings-Battelle, Sizing the Clean Economy, July 2011
- Brookings-Battelle, Methodological Appendix for Sizing the Clean Economy, July 2011
- Bureau of Labor Statistics, Measuring Green Jobs, www.bls.gov/green/, accessed 20July2011
- Clean Edge, http://www.cleanedge.com/leadership/, accessed June, 2011.
- Information Technology & Innovation Foundation, The 2010 State New Economy Index, Nov 2010.
- Massachusetts Technology Collaborative &John Adams Innovation Institute, Index of Massachusetts Innovation Economy, 2009.
- Michigan Economic Development Corp & SRI International, Benchmarks for the Next Michigan: 2010 Update.
- Next10, California Green Innovation Index, 2010.
- New York Academy of Science, Innovation and Clean Technology in New York State, and here 2009.
- New York State, Task Force on Diversifying the New York State Economy through Industry-Higher Education Partnerships, Dec. 14, 2009.

Table 1 Clean Economy Industry Categories & Segments[1]

Clean Economy Category	**Clean Economy Segment**
Renewable Energy	Biofuels/Biomass Geothermal Hydropower Renewable Energy Services Solar Photovoltaic Solar Thermal Waste-to-Energy Wave/Ocean Power Wind
Energy & Resource Efficiency	Appliances Battery Technologies Electric Vehicle Technologies Energy-saving Building Materials Energy-saving Consumer Products Fuel Cells Green Architecture and Construction Services HVAC and Building Control Systems Lighting Professional Energy Services Public Mass Transit Smart Grid Water Efficient Products
Greenhouse Gas Reduction, Environmental *(Omitted for this program)*	Air and Water Purification Technologies Carbon Storage and Management Green Building Materials Green Chemical Products Green Consumer Products Nuclear Energy Pollution Reduction Professional Environmental Services Recycled-Content Products Recycling and Reuse Remediation Waste Management and Treatment
Agricultural & Natural Resources Conservation *(Omitted for this program)*	Conservation Organic Food and Farming Sustainable Forestry Products
Environmental Compliance, Education, and Training *(Omitted for this program)*	Regulation, Compliance and Training

[1] See Brookings-Battelle, p16.