



Inventory of Supply Side Organizations in New York State's Clean Energy Economy
Request for Proposal (RFP) 2917
\$ 400,000 Available

Proposals Due: June 18, 2015 by 5:00 PM Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) seeks proposals from organizations or individuals to inventory and characterize entities that operate within the various segments of New York State's Clean Energy Economy. The project will develop a detailed geo-coded inventory of clean energy organizations within the State that create "value-added tradable products" for various clean energy segments (e.g., photovoltaics [PV], smart grid, advanced buildings, wind energy, etc.). The information resulting from this project will be used to inform NYSERDA technology and business development programs. The data may also be used to assist State agencies and economic development entities in the development of policies and programs to foster continued growth in the State's Clean Energy Economy.

The selected contractor(s) will be required to identify clean energy organizations, characterize their respective roles in the business cycle (e.g., research, materials, advanced tooling, component manufacturing, finished assembly, etc.), geo-spatially map each organization, and use this information to identify clusters and core strengths in New York State.

Proposal Submission: Electronic submission is preferable. NYSERDA will also accept proposals by mail or hand-delivery. If submitting electronically, proposers must submit the proposal in either PDF or MS Word format with a completed and signed Proposal Checklist and Disclosure of Prior Findings of Non-Responsibility, in PDF format. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. Proposals may be submitted electronically by following the link for electronic submissions found on this RFP's webpage, which is located in the "Current Opportunities" section of NYSERDA's website (<http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx>). Instructions for submitting electronically are located in that section as Attachment E to this RFP.

If mailing or hand-delivering, proposers must submit (2) paper copies of their proposal with a completed and signed Proposal Checklist, along with a CD or DVD containing both a PDF and MS Word digital copy of the proposal, following the above guidelines. Mailed or hand-delivered proposals must be clearly labeled and submitted to:

**Roseanne Viscusi, RFP 2917
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399**

If you have technical questions concerning this solicitation, contact Christine Gifford at (518) 862-1090, ext. 3576 or christine.gifford@nyserda.ny.gov. If you have contractual questions concerning this solicitation, contact Elsyda Ahmed at (518) 862-1090, ext. 3232 or elsyda.ahmed@nyserda.ny.gov

Bidders Conference Call Information:

Date: May 26, 2015 1-3pm

Toll-free dial-in number: (866) 394-2346

Conference code: 5846744188

Please RSVP to Christine.Gifford@nyserda.ny.gov by 5pm on Wednesday, May 20th.

No communication intended to influence this procurement is permitted except by contacting Christine Gifford (Designated Contact) at (518) 862-1090, ext 3576 or christine.gifford@nyserda.ny.gov. 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 will be returned. Incomplete proposals may be subject to disqualification. It is the bidder's responsibility to ensure that all pages have been included in the proposal. 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.ny.gov.

I. Introduction

To maximize its opportunities with limited resources, New York State program initiatives should be informed by comprehensive information about the current state of the Clean Energy Economy. Research supports the premise that regional industry concentrations, or “clusters”, have shown much faster rates of growth and job creation than isolated establishments, and a cluster-based approach to economic development is successful. However, very few States have access to the rigorously-gathered, granular information needed to make objective assessments about the nature, prospects, and needs of their local clean energy clusters.

The purpose of this study is to better understand New York’s key clean energy assets and will be organized as a data-driven analysis on the size, composition, and core competencies of clean energy organizations within the State. The study outcomes will help identify opportunities to accelerate growth in New York’s Clean Energy Economy and is designed to provide NYSERDA with information that allows for increased focus and more appropriately targeted resources on opportunities with maximum strategic significance. For example, the study may identify a niche within a segment, or identification of areas that support resiliency, or other opportunities as a means of enhancing the State’s investments in these areas.

The study will create an inventory of organizations within the identified segments of the Clean Energy Economy, classify their role within the industry (e.g. research, component manufacturing, or final assembly) and identify New York’s core competencies within these market segments. The study will include an inventory of New York State assets that have value across segments, such as university research centers and pro-typing facilities. It should be noted that clean energy services are considered to be outside the scope of this study effort.

Definitions

For the purposes of this study, the following definitions apply:

- **The Clean Energy Economy** is defined as economic activity that produces goods designed to increase energy efficiency or generate various types of renewable energy, including heat, power and fuels. The solicitation is not targeted toward water efficiency, conservation, or non-renewable sources of energy such as coal, nuclear power or natural gas, nor is the solicitation targeted towards clean energy services.
- **Organizations in the Clean Energy Economy** include:
 - Start-up and established businesses engaged in researching, developing, commercializing and manufacturing clean energy products directly related to increasing energy efficiency or generating renewable energy.
 - Universities, research centers and test facilities, business incubators, and proof-of-concept centers related to increasing energy efficiency or generating renewable energy.
 - This definition does not include organizations involved with the distribution, sale, installation, or operation of clean energy goods. It also excludes services such as legal and financing. It does not include businesses engaged in researching, developing, commercializing or manufacturing products that do not directly result in the increase of energy efficiency or generation of renewable energy (e.g., low VOC paint).
- **Value-added Tradable Products** are defined as: goods that can be consumed somewhere other than where they are produced; products that add value by using skills and technologies uniquely applied to clean energy.¹
 - *Products*: goods that are available for purchase or provided by public sector entities as public goods should be considered.²

¹ Rothwell, J. et al. (July 2011). Methodological Appendix for Sizing the Clean Economy: A National and Regional Green Jobs Assessment. Metropolitan Policy Program at Brookings

² Ibid.

- *Value-Added Clean Energy*: Companies will be included in this study only if they “add value [to clean energy products] using skills or technologies that are uniquely applied to those products.”³ For example, if a company manufactures screws, which are used in cleantech products just as they would be in any other product, then the screw manufacturer will not be included in the definition. However, if a company manufactures a product that is uniquely applied to cleantech, such as wind turbine blades, then it will be included in the study.⁴
- *Tradable*: goods that can be consumed somewhere other than where they are produced.

II. Program Requirements

This section reviews the specific services requested, contractor/proposer eligibility, and the responsibility of each party to the agreement.

A. Services Requested

The successful proposer will be required to provide, but shall not be limited to, the following tasks:

TASK 1: Project Management

Subtask 1.1: Project Manager

The Proposer shall assign a project manager who will be responsible for communications with NYSERDA and coordination of all project personnel, subcontractors, schedule, budget, and reporting. The project manager shall serve as the coordinator between all project participants, including coordination of written Monthly Progress Reports, conference calls, project review meetings, and other developments.

Subtask 1.2: Meetings

At a minimum, the Proposer must describe a project management plan including but not limited to the following:

- An in-person kickoff meeting in Albany, NY to present strategy and discuss project scope, objectives, and overall task prioritization, as well as interim goals, with NYSERDA staff. This meeting should take place after a scope of work has been developed
- Bi-weekly check in calls to discuss project progress, issues and questions
- As needed, periodic webinars to present interim deliverables and findings
- An in-person wrap-up meeting in Albany to present findings of Draft Report, and to discuss NYSERDA comments on the Draft Report.

Subtask 1.3: Reporting

The successful proposer shall be required to submit monthly written progress reports to NYSERDA’s Project Manager. The reports shall: summarize progress on contracted work efforts and provide interim results with respect to project objectives; identify problems encountered and how they will be resolved; indicate any significant deviation from the approved schedule; and summarize all costs incurred in relation to the budget and work progress.

TASK 2: Inventory of Organizations in New York’s Clean Energy Economy

The proposer will describe how it will create an inventory of organizations within the identified segments of the Clean Energy Economy, focusing on upstream organizations that provide value-added tradable products. Segments that should be considered for the inventory include: Solar (PV and Thermal), Smart Grid, Transportation

³ Ibid.

⁴ NECEC.

Technologies, Advanced Building Technologies, and Wind power. See Appendix A for additional detail on the areas that should be considered within each of these segments.

In addition to the more traditional hardware and manufacturing components of these segments, energy information technology components of each segment must also be considered. These components include information technology (IT) or software-enabling technologies that assist with the deployment of clean energy (examples include energy resource management systems, vehicle telematics, car sharing, demand-side management, and utility based solutions). The proposer should describe how it will incorporate energy information technology components into the inventory, and present a methodology for identifying and sorting energy information technology organizations independent of technology sector within the geo-coded inventory for the purpose of mapping.

The selected contractor(s) will be provided with a limited starting dataset of company information (i.e. company name and segment), pulled from various sources within NYSERDA, industry groups, and other state agencies. The proposer should describe the strategy(ies) to be employed in building upon the initial inventory information to deliver a more in-depth work product (i.e. how to identify additional information beyond the company name, how to identify additional companies beyond those provided etc). The proposer should describe a methodology for identifying and gathering information about organizations in the Clean Energy Economy. Key information that should be provided on each entity includes: organization name and address, contact person and information, segment, role in the business cycle (e.g. research, component manufacturing, final assembly, etc.), organization types (e.g. company, university research center, proof of concept center, etc.), specific products produced, core competencies, and whether the organization is an established company or a start-up organization. The proposer should indicate whether the information will be gathered using primary or secondary research, with a focus on obtaining the information in the most cost effective manner.

In describing its methodology for collection of inventory data (what is to be included, and why), the proposer should demonstrate how it will gather all necessary information about all organizations across all listed sectors, using a combination of primary and secondary market research. A justification should also be provided describing the data that will be collected using secondary market research and which data will be collected using primary market research. The split should maximize the amount of accurate data collected across all segments.

NYSERDA aims to conduct market/survey research that conforms to industry standards and best practices, meets acceptable sampling precision levels while reducing bias, and is transparent in terms of reporting outcomes and identifying the methods and approaches used to conduct those analyses. To the extent applicable, data collection and reporting procedures should conform to CASRO guidelines that seek to support and improve the integrity and quality of research through agreed-upon rules of ethical conduct for research organizations that includes, but is not limited to, the responsibilities of a research organization to research participants (i.e., "respondents") as well as the responsibilities of organizations in reporting research project results. NYSERDA also has a number of data and research protocols, such as the secure and confidential intake of data at the end of a project; ensuring survey and interview responses are confidential to the extent permitted by law; and maintaining an ongoing record of respondents contacted during prior data collection efforts who have asked not to be contacted again. Such protocols will be provided to the selected contractor(s) who should follow them where applicable as the inventory is conducted.

Subtask 2.1: Characterize Core Competencies

The proposer should put forth a methodology to identify each entity's core competency, defined for the purpose of this study as an area of technical expertise or specialization. The proposer should then assess the organization level core competencies to identify those that are frequently occurring within New York's Clean Energy Economy. Other potential indicators of core competencies may include a clustering of NAICS codes, the number of patents in key technology areas, significant exports in key technology areas, frequent citation in academic papers, and federal R&D awards. Some examples include optics, imaging, precision mechanics, substrates, coatings, adhesives, mechatronics (the ability to marry mechanical and electronic engineering), thin films, and

microelectronics. The proposer should explain their approach for categorizing the core competency information, including how to identify an appropriate and useful number of core competencies to include.

TASK 3: Incorporate Energy Storage and Bioenergy Information into Inventory Database

In addition to the segments described in Task 2, NYSERDA will provide inventory information for the bioenergy and energy storage segments for the selected contractor(s) to incorporate into the final inventory work product. The proposer should describe a methodology for how this additional inventory information will be incorporated into the final inventory.

TASK 4: Plan to Update Information

NYSERDA may choose to update the inventory information on a periodic basis to ensure the inventory continues to provide value. The proposer should provide recommendations on how NYSERDA could conduct these updates. The proposer should propose a plan to organize the information, and a design for a system of data management which would allow the inventory to be easily and cost-effectively updated, including the additional or removal of appropriate entities, over time. The proposer should describe how frequently updates should be made and estimate the costs associated with the periodic updates. This cost estimate is separate from the \$400,000 available in this RFP. NYSERDA is not obligated to use the proposer's update methodology or provide funding for this task to the proposer or any other entity beyond the \$400,000 in this RFP. NYSERDA will retain all ownership and proprietary rights for collected data.

TASK 5: Mapping and Info Graphics

Working from the inventory developed in Task 2, proposers should describe how they will use geo-coded data to generate map images of the organizations within the clean energy economy gathered for the inventory. The description should include what layers of information will be presented in the maps. These layers should include, but not be limited to segment, core competencies, role in the business cycle, product type, energy information technology component⁵, etc. to allow the data to be filtered and sorted based on many criteria. The proposer should also describe how it will identify industry clusters from this data, including but not limited to clusters based on NYS Regional Economic Development Council (REDC)⁶ region and metropolitan area (Core Based Statistical Area [CBSA] level). The selected proposer will need to provide specific associated metadata to operationalize the data contained in the mapping. This includes detailed definitions and explanations of the input methodologies to allow for editing and updating of the existing data, as well as adding new data. The map images and associated data (e.g. shapefiles, data tables, etc.) will ultimately reside with NYSERDA.

In addition to GIS mapping, the proposer should also propose other info graphics they will create from the inventory information. The selected contractor(s) will work with NYSERDA to identify the appropriate visual representations of the inventory data. The proposer should describe how the mapping and info graphic information will convey the key findings from the inventory research.

Deliverables

The proposer should describe the associated deliverables for each task in the appropriate section of the proposal.

B. Program Eligibility.

This section reviews proposer eligibility and responsibilities of the proposer and NYSERDA.

⁵ The final report/product should include a map showing only the energy information technology components.

- Eligible parties may include consultants, academics, researchers, or inter-disciplinary teams. Proposers are encouraged to form inter-disciplinary teams when appropriate to meet project goals.
- Teams may consist of a variety of entities: scientists; analysts; technologists; experts in specific fields; economists; commercial firms; government organizations; universities; research organizations; industry associations; or other stakeholders.
- Result-oriented teams with multi-disciplinary expertise, and experience in completing complex technical reports or publications are encouraged.
- Teams should consider providing the following technical expertise: economists; engineers; technologists; experts in: information technology, data centers, telecom, survey methods, primary data gathering, quantitative research methods, statistics; or experts in related fields, as appropriate.
- The lead proposer could be any organization responsible for successful completion of the project. If the proposal is selected for funding, the lead proposer will be selected to enter into an agreement with NYSERDA as NYSERDA's contractor.

Proposers must:

- Include letters of commitment from each team member in an appendix to the proposal.
- Address, at a minimum, each of the tasks listed in Section II.A.
- Define specific deliverables to be met at the completion of each objective. Interim deliverables that provide feedback to NYSERDA for use in evaluation of progress are required. It is anticipated that certain tasks will need to be completed earlier than others. In particular, the Draft Report should identify data uncertainties as well as additional outreach needs.
- Provide a research methodology within the proposal, both summarized briefly in the Executive Summary, and included in the proposed tasks as appropriate.
- Identify and emphasize, as appropriate, other innovative and effective approaches, strategies, and tools that support the Goals and Objectives of this RFP.
- Describe the management plan, including how the management plan has been organized, and how the team will partner with other research groups.
- Describe how the technical breadth of the project team addresses the necessary balance of interdisciplinary experience for successfully completing the project.
- Provide evidence of a demonstrated track record of successfully completing complex subject-relevant technical reports or publications in a timely fashion.
- Identify the Project Manager who will be responsible for managing the team. Previous experience managing diverse teams is highly desirable. Provide actual examples of relevant past work.
- Include tasks in the proposal to develop and implement strategies to measure success of the project. Specify performance goals.
- Submit a per-task cost table.

- Address the required timeline for the proposed work. All work should be completed by the end of 2015. The proposer should identify appropriate interim deliverables.
- Cost sharing is not required, but encouraged. Specifically, quantification of existing datasets should preferably be included as cost-share.

Other Proposer Considerations:

- A proposal may be considered non-responsive if it fails to comply with the requirements above, the Proposal Format of Section III, or the General Conditions of Section V.
- Before an award is made, potential contractors may be required to demonstrate: access to financial resources sufficient to perform the proposed work, appropriate technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.

C. Contractor's Responsibility,

The selected contractor(s) shall be responsible for timely completion of the requirements described in this RFP.

The selected contractor(s) must assume the overall responsibility for: coordinating and developing data collection, analysis and reporting required by this RFP (whether or not done by the contractor or one or more subcontractors); acting as liaison with participating NYSERDA programs and external organizations; and adhering to proposed project budgets and completing the deliverables listed in this RFP.

The selected contractor(s) shall keep NYSERDA informed bi-weekly either by telephone, in-person meetings or e-mail on the progress of the market characterization and analysis efforts. The selected contractor(s) shall participate in approximately two meetings with NYSERDA staff at the start of the project, and upon delivery of the draft final report.

The selected contractor(s) shall coordinate closely with NYSERDA to present a complete picture of desired target market.

D. NYSERDA's Responsibility

The NYSERDA Project Manager will be responsible for overseeing and managing all tasks undertaken by the selected contractor(s), including but not limited to reviewing, commenting and approving tasks and subsequent deliverables; coordinating with program staff and interested external stakeholders; promoting coordination between the selected contractor(s) and NYSERDA's other evaluation contractors; and approving invoices promptly.

E. Available Funds

The maximum total funding available to support the services requested under this RFP is \$400,000. The project is expected to be completed within 6 months. Proposers should put forth their best proposal to address the scope of services requested in the time and budget allowed.

III. Proposal Requirements

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics. 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 RFP number, and the page number. Your goal as a proposer should be to concisely present the information needed to fully address the Objectives and Evaluation. Proposals that fail to follow the format guidelines may be rejected as non-responsive.

The technical proposal must be organized in the following format:

Proposal Checklist
Section 1: Introduction and General Information
Section 2: Executive Summary
Section 3: Statement of Work/Approach
Section 4: Management Structure
Section 5: Qualifications
Section 6: Project Schedule and Staffing Plan
Section 7: Potential Conflict of Interest
Section 8: Cost proposal

Appendices:

- Letters of Commitment from all subcontractors
- Research Methodology Addendum
- Resumes of key personnel that will complete the tasks described in "Section II Project Requirements – Services Requested"
- Summaries of related work products that demonstrate proposers ability to perform the tasks identified (by organization and key personnel)
- Additional supporting material deemed necessary by the proposer (optional).

A. Technical Proposal Explanation

Proposal Checklist. Complete and sign the Proposal Checklist attached to this RFP, and include it as the front cover of each copy of the proposal. Note the following:

- Indicate whether you accept the Standard Terms and Conditions as contained in the attached Sample Agreement. If you do not accept the Standard Terms and Conditions, be prepared to provide alternative terms with justification based on the risk and benefit to NYSERDA and New York State.
- Be sure the individual signing the Checklist is authorized to commit the proposer's organization to the proposal as submitted.

A completed and signed Proposal Checklist must be attached as the front cover of your proposal. **Late proposals will be returned and proposals lacking the appropriate completed and signed Proposal Checklist may be returned. Faxed or e-mailed copies will not be accepted.**

Section 1: Introduction and General Information

This section should provide an overview of the proposal.

Section 2: Executive Summary. Briefly summarize your proposal emphasizing the following:

Critical questions to be addressed in statement of work.

- The research methodology, including how data will be gathered and analyzed (the proposer should also fully describe research methodology in specific tasks/objectives in the Statement of Work).
- Alternative approaches/methodology, and why your proposed approach/methodology was selected. Include assumptions.
- Benefits if the project is successful. Describe the benefits of this study and how the findings of this report useful, including potential additional uses for data collected.
- The executive summary should be no more than two (2) or three (3) pages in length. Please put the bulk of your effort into fully describing each task in the Statement of Work.

Section 3: Statement of Work/Approach. The Statement of Work is the primary document that outlines work activities and required performance for payment by NYSERDA. The Statement of Work must be in compliance with the scope of services requested, deliverables, and schedule outlined in this RFP. It is an action document that specifically delineates each step or procedure required to accomplish the tasks as listed in the Section II Program Requirements of this RFP. Therefore, each task shall be identified, indicating who will perform it, how why it will be performed and its intended result. Include quantifiable milestones as deliverables where possible. The Statement of Work must be structured as an ordered set of tasks. Please refer to program requirements (tasks) in drafting the statement of work.

Section 4: Management Structure. Proposers should identify all team members, including the Project Manager and any subcontractors, who will be responsible for ensuring that the project is timely and of good quality. Provide a clear description of the roles and responsibilities of each person in completing the work plan. Provide the names and addresses of subcontractors and describe how they were chosen. Provide an organization chart. Describe how you plan to coordinate this study with NYSERDA Energy Analysis staff. Resumes of all team members should be provided in an appendix.

Section 5: Qualifications. Describe specific experiences relevant to the performance of this type of project. Discuss proposed teaming arrangements, if applicable. A letter of commitment must be included for each team member in the proposal and should be included as part of the appendices. State the team's individual and combined expertise that would enable successful completion of the project. List and briefly describe relevant projects that have been completed by the proposer/proposing team, including projects completed in New York State. Indicate which team members were responsible for each project described. Indicate the name and telephone number of at least three references for whom your organization has completed similar projects. Summaries of prior work and other supporting materials that demonstrate your ability to complete the work requested in this RFP should be submitted as attachments to your proposal.

Section 6: Schedule and Staff Plan. The proposer should include a timeline for completing each task and major sub-task identified in the Statement of Work. Prepare a master schedule in bar chart form showing anticipated starting and completion times for each task, in terms of weeks or months after the contract is signed. The staffing plan should identify key personnel, including any subcontractors or other resources, responsible for completing each task. **PROVIDE A TABLE SHOWING THE NUMBER OF HOURS EACH KEY PERSON OR SUBCONTRACTOR WILL SPEND ON EACH TASK AND THE TOTAL HOURS PER TASK.**

Section 7: Potential Conflict of Interest. Identify the nature of any potential conflict of interest your firm might have in providing services to NYSERDA under this RFP. Discuss fully any conflicts of interest, actual or

perceived, which might arise in connection with your firm's performance of the proposed agreement. If conflicts do or might exist, describe how your firm would resolve them.

Section 8: Cost Proposal. Using the Attachment C Contract Pricing Proposal Form (CPPF) as a template, submit the name, title, and hourly rate or salary range for the duration of the agreement for each individual proposed to perform the work outlined in Section II Program Requirements, Subsection A, Services Requested (including all subcontractor personnel). Use the CPPF to provide overhead multipliers for the duration of the approximately 9 month agreement.

Attach documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

1. 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).
2. If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
3. If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). 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 adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

Travel expenses should be limited to activities that are necessary for the completion of project work, and cost share on travel expenses is strongly suggested. Necessary activities include tasks such as the kick-off and wrap up meetings, and direct stakeholder engagement. Any travel expense will need to be justified.

Per-Task Cost Table (required)

It is anticipated that projects will be paid on a performance basis as per-task deliverables and overall performance targets are met. Therefore, proposers must submit one (1) table indicating both:

- 1) the total expenditures for each task in the Statement of Work, and
- 2) the percent of total effort for each task.

Please note: Meetings based in Albany, NY are required. NYSERDA and the project team will review the First Draft Report and NYSERDA may request additional analysis or clarification on certain tasks. Allow funds for further analysis of identified issues in between submission of the First Draft Report and the Final Report.

Cost Sharing Table (include only if cost-sharing is provided) Cost sharing is not required, however leveraging of other funding is encouraged. Cost sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. NYSERDA will not pay for efforts which have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. Show the cost-sharing plan in the following format (expand table as needed):

Source	Cash	In-Kind Contributions	Total
NYSERDA	\$	\$	\$
Proposer			
Others (list individually)			
Total	\$	\$	\$

Appendices

Materials to be submitted include:

- Letters of Commitment from all subcontractors.
 - Research Methodology Addendum
- Additional supporting material deemed necessary by the proposer (optional).

Proposal Submission

Proposers must submit the appropriate number of copies of the completed proposal to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice/Request for Proposal. A completed and signed Proposal Checklist must be attached as the front cover of your proposal, one of which must contain an original signature. **Late proposals will be returned and proposals lacking the appropriate completed and signed Proposal Checklist may be returned. Faxed or e-mailed copies will not be accepted.**

In compliance with §139-j and §139-k of the State Finance Law (see Section VI, General Conditions below for additional information), 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 may disqualify your proposal.

IV. Proposal Evaluation

All proposals received by the due date and meeting the requirements established in this RFP will be reviewed and ranked by a Technical Evaluation Panel (TEP) consisting of NYSERDA staff and selected outside reviewers. Final rankings and the contract award(s) will be based on the following Evaluation Criteria:

Responsiveness to the Work Scope of the RFP.

1. Does the proposer present a sound approach for accomplishing the objectives of this proposal?
2. Is there a sound rationale or justification for the proposed approach (es)?
3. Is there clear evidence that the proposer possesses the capability to complete this study?
4. Is the Statement of Work thorough, specific, and consistent with the stated objectives?
5. Has the proposer addressed, at a minimum all of the tasks listed in Section II.A of this solicitation?
6. Has the proposer defined specific deliverables to be provided at the completion of each objective?
7. Has the proposer provided a research methodology, both as part of an executive summary and included per task (where appropriate)?
8. Has the proposal identified and emphasized, as appropriate, other innovative and effective approaches, strategies and tools supporting the Goals and Objectives of the RFP?
9. Are tasks included in the proposal to develop and implement strategies to measure success of the project? Are specified performance goals provided?

10. Does the response to the RFP demonstrate a complete and thorough understanding of the project requirements?
11. Does the proposer address the required timeline of proposed work?

Relevant Experience and Qualifications.

1. Is there clear evidence that the proposer possesses the capability to conduct this work?
2. Are key personnel's education and experience relevant to project needs?
3. Is the project staff's overall capability appropriate?
4. Does the proposing team have experience in conducting similar research work?
5. Does the proposing team demonstrate experience in geographic information systems/science (GIS), or demonstrate other related cartographic, geographic or geospatial expertise?
6. Does the proposing team demonstrate experience in creating graphical and visual representations of data?
7. Does the proposal describe how the technical breadth of the project team addresses the balance of interdisciplinary experience?
8. Were examples of relevant past work provided?
9. Has the proposer provided evidence of a demonstrated track record of successfully completing subject-relevant technical reports or publications in a timely fashion?

Comprehensiveness of Approach and Management Plan.

1. Was a management plan described, including how the team will partner with other research groups?
2. Was a project manager who will be responsible for the management of the team identified?
3. Is there one team member designated as the day-to-day NYSERDA contact?
4. Has the proposer demonstrated the ability to institute appropriate data collection and analysis procedures?
5. Are appropriate management and coordination strategies articulated, including mechanisms for meeting coordination of staff that are off site and/or meetings with NYSERDA staff if not a local office?
6. Is the project organization, including the staffing plan, clear and well-defined?
7. Does the proposer describe a data collection quality control strategy?
8. Is the staffing plan sufficient to provide timely deliverables?
9. Does the management plan describe a process to provide periodic progress reports to NYSERDA?

Cost.

1. How cost-effective is the proposal?
2. Are hourly rates, overhead rates, indirect cost, other cost multipliers, and total hours reasonable and appropriate for the proposer's and subcontractor's personnel completing the tasks?
3. Are the proposer's and subcontractor's rates cost effective when compared to the cost allocation of comparable proposals?
4. Are the cost allocations sufficient to cover all of the study goals?
5. Is the cost structure comprehensive enough for reviewers to understand how each study requirement will be fulfilled?
6. Has a per-task cost table been included?
7. If including cost-share, are cost-share items outlined specifically?

Other.

1. Other considerations including, but not limited to past experiences with the contractor, notable position in the industry, known accomplishments on similar engagements, etc.

NYSERDA reserves the right to interview top proposers prior to making a final selection.

V. 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 except 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://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.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
625 Broadway
Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
625 Broadway
Albany, NY 12207

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/current_forms/st/st220ca_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 one award under this RFP, but may make additional awards depending on the nature and strength of the proposals received. 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 (see Proposal Checklist). Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSERDA expects to notify proposers approximately 4-6 weeks from the proposal due date whether your proposal has been selected to receive an award. NYSERDA may decline to contract with awardees that are delinquent with respect to any obligation under 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.

VI. Attachments:

Attachment A - Proposal Checklist
Attachment B - Disclosure of Prior Findings of Non- Responsibility
Attachment C – Project Personnel and Rates Form
Attachment D - Sample Agreement
Attachment E – Instructions for Submitting Electronically
Attachment F – Intent to Propose

Appendix A: Segment Scoping Information

The segments in this study shall include, but are not limited to, the listed sub-segments and technologies. This information is intended to serve as guidance and is not meant to be an exhaustive list of technologies that could be included in the inventory. The selected contractor(s) will work with NYSERDA to finalize the information within each segment that will be included. While not specifically listed in all segments, the contractor(s) should consider IT and software-enabling technologies that assist with the deployment of clean energy, where applicable. The list below is an example of potential inventories by segment to provide information on level of effort to inform the drafting of a proposal; specifics will be discussed and negotiated between NYSERDA and selected contractor(s).

Transportation

- Vehicles
 - All electric
 - Rail transport innovation
 - Alternative Fuel Vehicles
 - Improved internal combustion (engine efficiency)
 - Hybrids
 - Water transport innovation
 - Components (e.g. advanced composites, lightweight materials)
 - eBikes
 - New vehicle types
 - System integration (includes improved integration of various systems within a vehicle to make it more efficient, vehicle to grid or vehicle to building integration, and smart transportation where vehicles are “communicating” with the transportation infrastructure)
- Traffic management
 - Fleet management
 - Traffic and route management
 - Lighting and signals
 - Parking management systems
 - Behavior management
- Fueling/charging infrastructure
 - Vehicle-to-grid (V2G)
 - Fast charging
 - Battery swapping
 - Induction
 - Alternative fuel conversion

Wind

- Turbines
- Components
 - Rotor
 - Gearbox
 - Generator
 - Controls and Electronics
 - Tower and Foundation

Smart grid

- Transmission
 - Sensors and quality measurement
 - Distribution automation
 - High voltage DC
 - Superconductors

- High voltage control devices
- RE & DER Integration/Interconnection
- Advanced Cabling/Conductors
- Substation Automation
- Demand management/response
- Energy management
 - Advanced metering infrastructure (AMI) and smart meters
 - Networking equipment
 - Monitoring and Controls
 - Utility Based Solutions
 - Advanced System Modeling/Applications
 - Software
 - Cyber Security
 - Quality and testing
 - Self-repairing technologies
 - Power conservation
 - Power protection
 - Data analysis systems

Solar

- Crystalline silicon
- Thin film
 - a-Si
 - CdTe
 - CIGS
 - Organic
- Inverters
- Other emerging PV technologies
- PV module technologies
- Concentrated solar power
 - Thermal
 - Photovoltaic
- Components
 - Racking
 - Collector
 - Panel
 - Connector
 - Power block
 - Utility meter
- Thermal
 - Storage Tank
 - Collectors
 - Pumps
 - Heat Exchangers
 - System Sensors
 - Controller

Green Buildings

- Design
- Building automation
 - Software and data analytics
 - Monitoring, sensors and controllers

- Metering
 - Networking and communication
 - Energy Resource Management
- Lighting
 - Ballasts and controllers, fixtures
 - Solid state lighting
 - Compact fluorescent lamps
 - Daylight harvesting
- Systems
 - HVAC (including heat pumps)
 - Refrigeration
 - Water heating