

Proposals Due: March 20, 2014 by 5:00 PM Eastern Time-Short Proposals Only.

Program Summary: The New York State Energy Research and Development Authority (NYSERDA) invites proposals to establish and operate an Advanced Buildings Consortium in New York State. This consortium will organize stakeholders, conduct targeted and high priority technology development and demonstration projects for buildings, and help accelerate the introduction of emerging technology into the New York building construction markets. The Advanced Buildings Consortium (ABC) will have a central technology theme in which to focus its efforts for improving energy efficiency and “resiliency, recoverability, and adaptability” (hereafter resiliency) of buildings to infrastructure disruptions. Undertaken projects will use building integration and whole building practices to develop energy technologies that lead to high performing buildings with lower first costs and reduced operating expenses.

It is expected that the ABC will be hosted at a university campus, architecture firm, engineering firm, or other cognizant organization focused on advanced building technologies. NYSERDA anticipates providing a maximum of \$7.5 million to support ABC activities over five years. Proposals will be expected to provide cofunding in the range of 25 to 50% of the ABC’s total budget. Cofunding will be an evaluation criterion, with larger cofunding ratios being scored higher.

NYSERDA will hold an informational conference call/webinar about this solicitation to answer questions on February 7, 2014, 11:00 AM Eastern Time. To join this call dial 1-415-655-0001, follow the instructions to enter the meeting access code 667 370 942 followed by the # sign. Additionally, you may join the webinar to view the presentation slides by directing your web browser to

<https://nyszerda-events.webex.com/nyszerda-events/onstage/g.php?t=a&d=667370942>

and entering the webinar event password 2630 when prompted. Check the NYSERDA PON website for updates as the question and answer session from the webinar may be posted there.

A two step evaluation process will be used that starts with submission of Short proposals. Proposers of the most promising short proposals will be invited to submit Full proposals for the final step of the evaluation process. Failure to submit a short proposal precludes submission of a full proposal.

Short Proposal Submission: Proposers must submit three (3) paper copies and one (1) CD 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. Proposals must be clearly labeled and submitted to:

**Roseanne Viscusi, PON 2630
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399**

If you have technical questions concerning this solicitation, contact Bob Carver at (518) 862-1090, ext. 3242 or rmc@nyszerda.ny.gov. If you have contractual questions concerning this solicitation, contact Venice Forbes at (518) 862-1090, ext. 3507 or vwf@nyszerda.ny.gov.

No communication intended to influence this procurement is permitted except by contacting Bob Carver (Designated Contact) at (518) 862-1090, ext. 3242 or rmc@nyszerda.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.org.

I. Introduction

NYSERDA's Operating Plan for Technology & Market Development Plan (T&MD Plan) called for the establishment of a buildings-focused consortium, hereafter called the Advanced Buildings Consortium or ABC.

(<http://www.nyscrda.ny.gov/Publications/Program-Planning-Status-and-Evaluation-Reports/SBCIV-Documents.aspx>)

The ABC is envisioned to conduct targeted and high priority technology development and demonstration projects that help accelerate the introduction of emerging technology into New York markets, including technologies that make buildings more resilient. The ABC will have broad representation from technology developers, designers, builders, building supply industries, operators and owners, and will improve the coordination between end-users and developers of building technologies. Stakeholders from the buildings industry will be used to identify technology and commercialization gaps; support early-stage feasibility and application development (with an emphasis on New York State valued added benefits, and facilitate introduction of new products and services to owners and operators in New York.

NYSERDA is using a two-step evaluation process for this solicitation. All organizations interested in applying for this program must submit a short proposal. All short proposals will be reviewed by a Technical Evaluation Panel (TEP). After completion of the short-proposal review, NYSERDA will issue a letter to each proposer indicating either a favorable or an unfavorable response. The favorably reviewed proposers will be invited to submit a full-proposal for a final evaluation by the TEP. The invitation will provide the date that full proposals must be received by. While full proposal requirements are provided in this document, they are subject to change based on received short proposals. Final full proposal requirements will be provided to those invited to participate in the second step of this solicitation.

Goal

The ABC's goal is to achieve higher energy and environmental performance and resiliency in New York's building stock. The ABC will accomplish this goal by developing three to five building products and/or construction practices during the course of its NYSERDA support. A successful consortium will be expected to have one product or practice achieve commercial adoption during the course of the project, have a second entering the commercial market at the end of the project, and have subsequent products or practices entering the commercial market within three to five years after completion of the project. The ABC will be expected to support the adoption of these products and practices by conducting workshops, conferences, and other outreach activities targeting decision makers in the buildings industry.

Although not a main focus, the ABC will also provide services and technical assistances, such as performing market intelligence on relevant new trends, identifying policy barriers that impede deployment of new technologies, and facilitating networking between product vendors and building owners/operators. These activities will be undertaken to support the consortium's efforts to achieve success.

II. Program Requirements

Approach

NYSERDA Buildings R&D Program's technology development approach is based on working with manufacturers, university researchers, and entrepreneurs with ideas for new technologies (e.g., PON 2606 Advanced Buildings Program). A critical aspect in the success of this approach is identifying factors or barriers that might hinder market adoption early in the development process before major design decisions or significant investments have been made. While NYSERDA has achieved considerable success with this approach, it is recognized that other technology development approaches could be as or more successful.

NYSERDA is seeking the formation of a consortium willing to use a stakeholder guided technology development process. In this process, stakeholders with deep knowledge and experience of the New York buildings industry (building developers/operators, design professionals, industry, academia, and other cognizant organizations focused on building technologies) are first organized to form the consortium. The consortium members then identify needed technologies through a facilitated process. Industry and academia members collaborate to develop the identified technologies. As the technology is developed, input is sought at key decision points from all

the members. A potential advantage of this approach is that the developed technology could be commercially adopted sooner because members have identified critical needs or avoided substantial barriers earlier in the development process due to their in-depth knowledge of the market.

Technology Focus Areas

The ABC will use building integration and whole building principles to develop new products and practices in a given technology focus area. Consortium projects will lead to buildings with high energy performance when the electric grid is available, and greater resiliency for occupants and businesses during multiple day electric grid disruptions. NYSERDA believes that “building integration” and “whole building” approaches are important design and operation philosophies because they consider not just the performance of discrete components, but the aggregate performance of larger systems or the overall building. Electric-grid disruption is chosen as the resiliency focus because it is where NYSERDA could likely make the most impact for buildings, as opposed to developing new construction methods for hurricane or flood resistant buildings.

The ABC will seek energy efficiency and resiliency research opportunities in either a specific technology focus area (such as building automation, HVAC, or building envelopes) or an overarching technology focus area (such as innovative retrofit technologies for existing buildings, increasing load flexibility in buildings to support a smart grid, or increasing on-site generation in buildings). The consortium will have only one technology focus area.

The ABC will conduct research activities that develop new technologies, perform industry-wide research on building problems, and demonstrate innovative technologies. Research activities may also include innovative integrations of existing technologies so that new products and practices could become commercially available to end users. Consortia can propose technologies for residential, commercial, and institutional building applications.

Examples of consortium developed products or practices under a given focus area could include the following:

- An LED fixture manufacturer teaming with an electrical components (e.g., switches, dimmers, or occupancy sensors) manufacturer to introduce new low-voltage DC powered lighting systems.
- PV system integrators teaming with component manufacturers to optimize systems that utilize battery storage, circuit switching requirements, and load management technologies to enable robust “ride-through” capability during electric grid outages and opportunities for energy storage.
- Integrated space and water heating appliances that provide productivity gains during installation for builders and provide energy savings for homeowners compared to separate appliances at a negligible first cost premium.
- Innovative solutions or business models that enable third parties to control smart thermostats and appliances to optimize energy savings for homeowners or businesses.
- Building automation algorithms that better manage loads during normal building operation and optimize critical and ancillary functions based on available onsite power generation or in response to compromised electric grid operations.

While the above listed technology focus areas and product/practices are of interest to NYSERDA, proposers are encouraged to present other promising concepts for consideration. In all cases, activities should lead to the introduction of new products and practices whose commercial adoption is supported with consortium workshops presenting best practice to building operators and owners, and publications on the state-of-the-art for various technologies.

Stages in the Technology Development Cycle

The stages in the development cycle in which the ABC works are an important consideration to NYSERDA. Because the results are sought to become commercially adopted in a near term time frame, the ABC activities should focus on applied research rather than basic research. Expected ABC activities could include proof of concept, application development, prototype development, field demonstration of prototypes, and development and fabrication of initial commercial units.

A consortium is not sought to perform demonstrations of commercially available technologies because NYSERDA has existing programs to support such activities (Emerging Technologies and Accelerated Commercialization (ETAC) <http://www.nyserdera.ny.gov/Energy-Innovation-and-Business-Development/Emerging-Technologies-and-Accelerated-Commercialization.aspx>). Commercially available technologies are considered to be products or services that are available in the marketplace, can be accessed through retail or distributional outlets, have manufacturer or independent third-party performance data publicly available, have been successfully demonstrated or installed, and marketing and sales efforts are underway.

NYSERDA is interested in ABC concepts that include integration of commercially available technologies to provide higher levels of building performance. This integration must be more than a grouping or bundling of commercially available technologies as done on conventional energy projects (e.g., energy-efficient pump motors combined with HVAC equipment). The sought integration effort would be expected to include a technology development effort to change existing products' designs to enable them to operate together. .

Proposers should contact NYSERDA's designated technical contact if they are not clear if specific activities are applied research or integrations of commercially available technologies.

Operation of the Advanced Buildings Consortium

New York State Presence and Participants

NYSERDA seeks a consortium focused on and engaged in activities for and within New York State. The consortium must operate from a New York State location and have a director that works from the New York State location. It is anticipated that the Director's activities will be supported by staff and performed from the same location. The Consortium membership shall consist of individuals and businesses with a vested interest and knowledge of the specific opportunities and barriers unique to buildings located in New York State.

Leadership

Proposals should be submitted to NYSERDA from the organization designated to lead the consortium. Consortia should carefully select who will be the lead organization as a change post award will likely result in a delay in contracting or cause the award offer to be withdrawn. Changes in lead organization after an award will result in NYSERDA issuing stop work orders until necessary contract assignments are executed, which could cause a multiple month project delay.

NYSERDA will require a designated consortium director to be identified whose responsibilities will be to perform the management functions needed for the consortium to achieve the goals of this initiative. NYSERDA will expect the director to use a significant portion of his or her work time for managing the consortium. NYSERDA expects a consortium director need to spend a minimum of 50% of their time managing this effort. The director may have staff to assist with day to day operations of the consortium and business development activities. NYSERDA expects the consortium director and any staff to be identified at the time of proposal submission and to be employees of the lead organization. Changes in the consortium director after full proposal submission and during the course of the ABC's work will be subject to NYSERDA's approval.

NYSERDA expects that the consortium will have an executive committee (or board of directors) whose responsibility will be to make decisions that guide the ABC's efforts. This executive committee will be composed of the consortium director and other key members (e.g., members committing significant resources or performing research activities under the Research Plan described later in this document). In order to avoid the appearance of a conflict of interest, NYSERDA will not serve as a member of the executive committee.

Startup

NYSERDA expects that the ABC will be hosted at a university campus, architecture firm, engineering firm, or other cognizant organization focused on advanced building technologies. The ABC is expected to be either led by an existing organization (similar to a center at a university) or a newly formed organization. NYSERDA will not provide any funding or technical, legal or contractual staff assistance for the formation of a new legal entity for the ABC (e.g., drafting articles of incorporation for a new limited liability corporation). The consortium will be expected to mobilize members quickly on needed work and avoid becoming mired in lengthy unproductive

proceedings to establish its identity and underlying structure after receiving NYSERDA's award. NYSERDA will prefer supporting a consortium that requires minimal formation activities and start-up expenditures.

Membership Management

Building industry participation will be critical for the success of the ABC since it will provide the key insights that are expected to lead to quick adoption of developed technologies. NYSERDA expects the ABC to have members representing 15 to 35 organizations prior to the first annual program review. Members must include representatives from academia, industry, design professionals, and building developers/operators with deep knowledge of the New York buildings industry. Members should be identified that have the experience and qualifications needed to serve this function for the consortium. Members will not be compensated for their time participating in meetings or serving on the executive committee.

Building industry stakeholders should be required to demonstrate a level of commitment to become a consortium member. For example, commitment could be shown with the signing of a memorandum of understanding and a modest financial contribution (e.g., one time membership fee).

The consortium director will be responsible for the following membership management activities: membership recruitment, organizing meetings, networking, and supervision of assigned consortium work. A member of the consortium director's staff may serve as the contact point between the consortium and its membership.

Funding Allocation

NYSERDA funding is envisioned to be distributed across activities as follows.

Research, Development & Demonstrations	\$4.5 million (60%)
Outreach, Assistance Program and Other	
Technical Services	\$1.5 to 2 million (20% to 26%)
Consortium Administration	\$1.0 to 1.5 million (14% to 20%)

Research Plan

Proposers will be expected to include in their proposals a multi-year research plan for their selected focus area that describes in detail the activities to be conducted with NYSERDA's funding. Proposers will be expected to substantially specify the research agenda (80% of the funding proposed for the research agenda with identified subcontractors, contractible statement of works and budgets).

While proposers may request funding for 100% of their research plan, NYSERDA will only award a contract for the portion of the research with identified subcontractors and contractible statements of work and budgets. Subsequent funding additions to complete the originally proposed research plan will be subject to NYSERDA's standard subcontracting (multiple competitive bids process, sole source justification) and cost-modification approval processes (as further explained in the Attachment E, Sample Agreement, Section 5.02).

NYSERDA recognizes that multiyear research plans are difficult to prepare with a high degree of certainty. The ABC will be permitted to propose research plan modifications based on interim results and finding at the second year's annual program review.

NYSERDA prefers the lead organization to not be the primary recipient of the funding allocated for the completion of development and demonstration activities. It is expected that a subset of ABC members will receive subcontracts to complete activities and that these members, taken together, will be the primary recipient of the development and demonstration funding. These subcontracts will be between the lead organization and the members. However, the contract between NYSERDA and the lead organization will provide NYSERDA the right to require the lead organization to modify or terminate a subcontractor's statement of work whose performance is not acceptable.

Assistance Program

NYSERDA would like the ABC to become a recognized technical source in New York State. In support of this desire, the ABC will be asked to establish a members' technical assistance program from which members could receive assistance with small problems within the consortium's focus area. This assistance would be limited to

efforts less than \$50,000 that provide significant New York State economic benefits, require 50% cost sharing from the member, be on a first come first serve basis and be subject to other qualifying criteria. Up to \$500,000 of the ABC's total funding will be allowed for providing technical assistance to members. Assistance would be provided by consortium research partners or technical consultants. NYSERDA would approve all assistance requests prior to their start. This assistance would not overlap with what is offered by deployment programs such as FlexTech, New Construction Program Technical Assistance, or Multifamily Performance Partners.

An example for this assistance program would be: consider an ABC focusing on HVAC with a member who is a boiler manufacturer and is experiencing a materials compatibility problem with a product. Because of their membership in the ABC, this boiler manufacturer could obtain technical analyses for identifying strategies to potentially address this problem.

Outreach Activities

The ABC will be expected to conduct several outreach activities with the awarded funding. NYSERDA expects one conference and one workshop each year to be offered covering the technical areas of the products or practices being developed by the consortium. The ABC will also be expected to conduct member and advisory meetings. NYSERDA expects that the ABC will conduct 15 to 35 such outreach events (e.g., conferences, workshops, consortium meetings, and advisory meetings) during the period of NYSERDA's funding.

The ABC is not sought to perform workforce development activities that are supported by other NYSERDA programs. (<http://www.nyserdera.ny.gov/BusinessAreas/Energy-Education-and-Workforce-Development/Workforce-Development-and-Training-Programs/Clean-Energy-Intro/Energy-Efficiency-Training.aspx>)

Annual Program Reviews

The consortium activities will undergo annual program reviews by NYSERDA's management team (e.g., Project Manager, and other relevant team members as necessary) to monitor the progress of the ABC. At the year two program review, NYSERDA's management team in conjunction with external technical experts will judge the progress and achievements to-date. Following this review, NYSERDA will decide on the appropriateness of continuing the consortium or making changes to the originally proposed research agenda based on the progress and achievement.

Proposers should not interpret this described process to alter or supplant the termination terms and conditions in NYSERDA's attached sample agreement.

Intellectual Property Policies

An important issue in many consortiums is intellectual property rights. The ABC will be expected to establish the consortium policies for the rights to existing and discovered intellectual property between members. Proposers whose short proposals are favorably reviewed will be expected to include proposed ABC intellectual property policies with their full proposals for NYSERDA review.

Participation in other NYSERDA Buildings R&D PONs

The ABC will be receiving a considerable funding award from NYSERDA to support its activities. NYSERDA does not expect the ABC to seek additional funding from any other Buildings R&D program (e.g. PON 2606 Advance Buildings Programs). NYSERDA discourages the submission of proposals from the ABC to other Buildings R&D programs before completion of work supported under PON 2630 Advanced Buildings Consortium. However, the lead organization and individual consortium members may submit proposals to Buildings R&D programs for activities outside the scope of the ABC's Research Plan.

Interactions with other NYSERDA programs

NYSERDA's Buildings R&D program has ongoing research projects covering a broad range of technologies. It is expected that the ABC's efforts could involve technical aspects relevant in other ongoing NYSERDA projects. When opportunities appear for mutually beneficial collaboration between the ABC and contractors from other R&D projects, NYSERDA's R&D Project Managers will facilitate the introductions and ongoing interactions. ABC activities may also be of interest to NYSERDA's ETAC programs. In cases where cross program interests appear complementary to NYSERDA, Project Managers for the Buildings R&D and ETAC program will confer to determine how best to facilitate any introductions and interactions.

Milestone billings

NYSERDA prefers to make payments based on performance-based milestones. Milestones could be based on Research Plan achievements, outreach activities undertaken, annual interim reports, and assistance program activities. Full proposals will be required to propose milestone billing events and associated payment amounts.

Reporting and Meetings Requirements

The reporting requirement expected for the ABC will include monthly progress reports, annual interim reports (e.g., to support annual program reviews), annual metrics reports, and a final report. The meetings requirement expected for ABC will include quarterly status review meetings with NYSERDA's Project Manager, annual program reviews with NYSERDA's management and other NYSERDA invited participants, and a final program closeout meeting.

Recoupment

NYSERDA will not seek recoupment from the consortium's outcomes inasmuch as the Consortium is expected to provide significant statewide public benefits.

Ineligible Activities

- Consortium activities that involve biomass or fuel oil are not eligible for support under this program.
- Consortium activities that involve demonstration of technologies in buildings outside of New York are not eligible for support under this program.
- A consortium is not eligible for support under this program if it operates the consortium from a location outside of New York State.

II. Proposal Requirements

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.**

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 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.

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, PON 2630, and the page number.

Short Proposal Requirements

The short proposals must be in the following format. Requested page limits are provided.

- **Technology Focus Area (one page)**
 - Describe the technology focus area in which the consortium will work.
 - Describe the products and practices the consortium will develop and bring to market in the technology focus area.
 - Describe how innovative the envisioned products and practices are compared to available technologies.
 - Describe which building sectors and markets the developed products and practices will benefit.
- **Current Technology Stages and Development Needed for Market Acceptance (one page)**
 - Describe the current stage of development or performance for each product and practice to be developed by the consortium.
 - Describe the advances that will be needed to move each product and practice from its current stage to being market ready.
- **Justification for the Technology Focus Area (one page)**
 - Explain the rationale for the consortium selecting the proposed technology focus area.
 - Identify the key resources that already exist in New York State needed for the consortium to succeed (e.g., potential manufacturing partners, university researchers, or specialized research equipment).
 - Explain why the envisioned products and practices in the technology focus area will address the energy, environment, economic and resiliency needs for a large number of buildings in New York State.
- **Benefits to New York for a consortium in the proposed Technology Focus Area (one page)**
 - Provide preliminary estimates of energy, environmental, and economic benefits for New York State building owners and developers of the envisioned products and practices.
 - Describe any resiliency benefits for buildings in New York State from the envisioned products and/or practices.
 - Estimate the number of manufacturers in New York State that could benefit from the envisioned products and/or practices.
- **Lead Organization and Consortium Director (two pages)**
 - Identify the organization and director that will lead the consortium. Where will the consortium operate from? Where will the consortium director work from?
 - Describe the experience and qualifications for the lead organization and consortium director in the technology focus areas, the envisioned products and practices to be developed. Summarize past technology development activities, and their results, of the lead organization and the consortium director. Summarize previous consortium efforts, and their results, of the lead organization and director.
 - Include the resume of the consortium director in an appendix.
- **Consortium Structure and Membership Management (one page)**
 - Describe the management structure that will be used to operate the consortium.
 - Describe how, and by whom, key decisions for the consortium's activity will be made.
 - Describe membership requirements for joining the consortium. Discuss what membership fees and signed agreements/MOUs will be sought. Discuss if a tiered membership structure will be used and how the level of benefits and commitments will differ between tiers.
- **Confirmed and Potential Consortium Members (one page)**
 - Summarize the individuals and organizations who have confirmed joining the consortium if it is funded by NYSERDA. Provide letters of support from these individuals and organizations in an appendix.
 - Describe the contributions that confirmed consortium members are providing to support this effort beyond staff time without reimbursement.
 - Summarize other notable individuals and organizations that have expressed interest in the consortium but have not yet confirmed their willingness to become a member.

Full Proposal Requirements

If notified by NYSERDA of a favorable short proposal review, the proposer will submit a full proposal by a date to be determined. Full proposals must be in the following format:

- **Technology Focus Area (two pages)**
 - Describe the technology focus area in which the consortium will work.
 - Describe the products and practices the consortium will develop and bring to market in the technology focus area.
 - Describe which building sectors and markets the developed products and/or practices will benefit.
 - Describe how innovative the envisioned products and practices are compared to available technologies.
 - Describe the current stages for the technologies to be used in developing the envisioned products and practices.
 - Identify any other consortiums, research centers, or initiatives active in the same or similar technology focus area and describe how their work differs from that of the proposed consortium.
 - Proposers are required to maintain the same Technology Focus Area proposed as in their short proposal. However, NYSERDA may allow changes to the envisioned products and practices and targeted building sectors between the short and full proposal submission.

- **Justification for the Technology Focus Area (two pages)**
 - Explain the rationale for the consortium selecting the proposed technology focus area.
 - Identify the key resources that already exist in New York State needed for the consortium to succeed (e.g., potential manufacturing partners, university researchers, or specialized research equipment)
 - Explain why the envisioned products and practices in the technology focus area will address the energy, environment, economic and resiliency needs for a large number of buildings in New York State.
 - Explain why a consortium-led effort will be more likely to overcome the technical, regulatory or market challenges related to commercializing the envisioned products and practices than a manufacturer or organization working alone.
 - Explain why it is reasonable to expect the consortium will be successful in attracting members from the buildings industry in New York State needed to guide the development efforts.

- **Benefits to New York for a consortium in the proposed Technology Focus Area (three pages)**
 - Provide a preliminary estimate of the number of buildings in New York State that could use the envisioned products and/or practices developed by the consortium.
 - Provide preliminary estimates of energy, environmental, and economic benefits for New York State building owners and developers of the envisioned products and practices.
 - Describe any resiliency benefits for buildings in New York State of the envisioned products and practices.
 - Estimate the number of manufacturers in New York State that could benefit from the envisioned products and practices.
 - Estimate the number of manufacturing and other jobs created or retained in New York State that could results from the envisioned products and practices.
 - Summarize the assumptions made in calculating each of the presented benefits.

- **Detailed Research Plan (15 pages)**
 - For each envisioned product or practice, identify performance goals needed to achieve market adoption and the tasks to be undertaken to develop the concept to the stated goal.
 - Provide a detailed scope of work for each product and practice for each task and subtask that describes undertaken activities and their objectives. Indicate the duration of each task and subtask in the schedule. Describe the deliverables and milestone for each subtask and task that can used to demonstrate progress made and possibly serve as the basis for a milestone payment. Use the Scope of Work Task template (Attachment C) to prepare the detailed scopes of work.
 - Identify which consortium member(s) will be responsible for completing each task.
 - Prepare a Contract Pricing Proposal Form (CPPF - see Attachment D) for each envisioned product or practice developed as part of the Detailed Research Plan showing the total cost and proposer cost-share. Provide a distribution by task of the NYSERDA funding needed and the cost-share provided for each product or practice being developed.

- Propose milestone payment amounts that could serve for NYSERDA reimbursements that are associated with deliverables and milestones identified in the scopes of work for each product and practice.
 - Describe the review and control mechanisms that will be used to ensure the scopes of work produce their expected outcomes for the funding allocated.
- **Lead Organization, Consortium Director, and other Key Consortium Members (two pages)**
 - Identify the organization and director that will lead the consortium. Where will the consortium operate from? Where will the consortium director work from?
 - Describe the experience and qualifications for lead organization and consortium director in the technology focus areas and the envisioned products and practices to be developed. Include in the experience demonstrated knowledge of the different phases of a building's lifecycle (e.g., design, construction, and operation). Summarize past technology development activities, and their results, of the lead organization and the consortium director. Summarize previous consortium efforts, and their results, of the lead organization and director.
 - Include the resume of the consortium director in an appendix. Also include informational materials for the lead organization that demonstrate its expertise in the technology focus area and envisioned products and practices to developed.
 - Identify the key consortium members that will receive subcontracts to perform needed research. Describe the experience and qualifications of key consortium members receiving subcontracts in relationship to the work they will undertake. Include the resumes of individuals performing work to complete these subcontracts.
- **Confirmed Consortium Members (two pages)**
 - Summarize the individuals and organizations who have confirmed joining the consortium if it is funded by NYSERDA. Provide letters of support from these individuals and organizations in an appendix.
 - Describe the contributions that confirmed consortium members are providing to support this effort. Contributions may include use of specialized equipment without charge, donated materials, significant staff time without reimbursement. Such contributions should be described in provided letters of commitment.
 - Summarize other notable individuals and organizations that have expressed interest in the consortium but have not yet confirmed their willingness to become a member.
 - Summarize other parties that could potentially be interested in becoming consortium that will be contacted if the application is awarded.
- **Member Engagement/Management Strategies (one page)**
 - Describe membership requirements for joining the consortium. Discuss what membership fees and signed agreements/MOUs will be sought. Discuss if a tiered membership structure will be used and how the level of benefits and commitments will differ between tiers.
 - Describe the methods for identifying and recruiting new members to join the consortium.
 - Describe the strategies for maintaining a high-level of member involvement throughout the development processes for the envisioned products and practices.
- **Assistance Program (two pages)**
 - Describe how the consortium would operate the assistance program for members.
 - Outline the procedure (possibly in a flowchart) used in providing assistance to a member from the initial request to the final deliverable. Discuss how requests are screened for appropriateness, and how scopes and budgets are prepared. Describe the type of agreement used between the consortium and members to document the 50% cost sharing. Indicate in the outline the points in the process where NYSERDA's approvals would be sought. Estimate the time elapsed between the member's initial request and the start of assistance.
 - Provide a preliminary list of the researchers and technical consultants within the consortium that could provide the services envisioned for the assistance program.
- **Outreach Activities and Other Services and Technical Assistance (one page)**

- Provide tentative conference and workshop themes that would be of interest to consortium members and technical individuals who were not consortium members. Describe who would have the responsibility for organizing and conducting these activities.
- Describe other services and technical assistance that the consortium plans to offer members and the buildings industry.
- **Risk Management (one page)**
 - Identify risks that may hinder or prevent the consortium from achieving success.
 - For each of the identified risks, provide a mitigation strategy. Risks to be considered include technical, market, financial and poor subcontractor performance.
 - In addition, discuss the strategies for mitigating the risk of NYSERDA's funds being mismanaged (e.g., failure to pay subcontractors, funding used for inappropriate expenses, etc.).
- **Intellectual Property Policy (one page)**
 - Describe the intellectual property policies the consortium proposes to use between members. If a tiered membership will be used, discuss how the intellectual property policies vary by tier.
 - Describe consortium's rights to use preexisting intellectual property held by a stakeholder needed for the purposes of completing anticipated work.
- **Budget (10 pages)**
 - Prepare an overall consortium budget using a Contract Pricing Proposal Form (CPPF – see Attachment D) showing the total project cost and proposer cost-share. This total project cost CPPF will be based on the CPPFs prepared as part of the Detailed Research Plan and the cost estimates for all the other consortium activities. For ease in preparing the total project cost CPPF, the cost and cost share amounts for each of the CPPFs prepared in the Detailed Research Plan may be entered as amounts for a subcontractor/consultant on the total project cost CPPF (see cost element 9 on CPPF).
 - As an addendum to the total project cost CPPF provide the following budget breakdown for NYSERDA funding and proposer cost-share by the following categories: Administration, Research Plan, Assistance program, Outreach Activities, and Other Services and Technical Assistance.
- **Schedule (six pages)**
 - For each product or practice developed in the Research Plan, prepare a schedule showing start and completion times for each task in months. Identify major milestones, tests, demonstrations, reports, and other deliverables on the schedule. Indicate the stages at which member feedback on developed technology will be sought.
 - Prepare a separate schedule showing the expected timing of Outreach Activities. Include on the schedule planned member and executive committee meetings on the schedule.

Both short and full proposals must also provide the following:

Cost Sharing - The proposal should show non-NYSERDA funding of at least 25% of the total cost of the project. 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):

	Cash	In-Kind Contribution	Total
NYSERDA	\$	\$0.00	\$
Proposer	\$	\$	\$

Others (list individually)	\$	\$	\$
Total	\$	\$	\$

Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal for the lead organization only 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.

Annual Metrics Reports – If awarded, the proposer will be required to submit to NYSERDA's Project Manager on an annual basis, 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 is 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 that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

III. Proposal Evaluation

Proposals that meet Proposal requirements will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria below.

Short Proposals

Lead Organization and Consortium Director Qualifications

- Do the Lead Organization and Consortium Director have the technical and managerial resources to form and operate a consortium?
- Do the Lead Organization and Consortium Director's qualifications and experience exhibit the technical knowledge to develop and commercialize the new products and practices envisioned by the consortium?
- Does the Lead Organization and Consortium Director's qualifications indicate significant knowledge and experiences in the different phases of a building's lifecycle (technology development, design, construction, and operation) as they pertain to the new products and practices envisioned by the consortium?
- Does the proposer provide prior examples of previous consortiums it has formed and operated, with summaries of their successful outcomes?

Consortium Members

- Are the identified members appropriate for focus area and goals?

- Do the identified members exhibit the technical knowledge to develop and commercialize the new products and practices envisioned by the consortium?
- Are members identified that represent building developers/operators, design professionals, industry, and academia?
- Do members demonstrate a good understanding for how buildings in NYS are designed, constructed and operated?
- Are the members providing significant and valuable contributions that will help to accomplish ABC's goals?
- How many members have provided letters of commitment?
- Are there a significant number of members from NYS organizations?

Focus Area and Proposed Products and Practices

- How unique is the proposed focus area from other existing consortiums/centers supporting buildings?
- Do the proposed products and practices being developed address market needs?
- Can the proposed products and practices be developed with the provided funding?
- Will the proposed products and practices produce energy benefits for a large number of NYS buildings in the short to mid-term time frames?

Benefits to New York

- Do the envisioned products and practices provide significant energy, environmental, and economic benefits for New York State building owners and developers?
- Do the envisioned products and practices provide any resiliency benefits for buildings in New York State to interruptions of the electric grid?
- Will a significant number of manufacturers in New York State benefit from the envisioned products and practices?

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.

Full Proposals

Review of the Short Proposals may lead NYSERDA to edit or modify the criteria that follow, to improve the evaluation of the proposals submitted.

Lead Organization and Consortium Director Qualifications

- Do the Lead Organization and Consortium Director have the technical and managerial resources to form and operate a consortium?
- Do the Lead Organization and Consortium Director's qualifications and experience exhibit the technical knowledge to develop and commercialize the new products and practices envisioned by the consortium?
- Does the Lead Organization and Consortium Director's qualifications indicate significant knowledge and experiences in the different phases of a building's lifecycle (technology development, design, construction, and operation) as they pertain to the new products and practices envisioned by the consortium?
- Does the proposer provide prior examples of previous consortiums it has formed and operated, with summaries of their successful outcomes?
- Does this proposed consortium effort appear to require minimal formation activities and start-up expenditures?
- Does the amount of time allocated to the consortium director in the budget appear appropriate for managing a consortium of this scale?

Member participants

- Are the identified members appropriate for focus area and goals?
- Do the identified members exhibit the technical knowledge to develop and commercialize the new products and practices envisioned by the consortium?
- Are members identified that represent building developers/operators, design professionals, industry, and academia?

- Do members demonstrate a good understanding for how buildings in NYS are designed, constructed and operated?
- Are the members providing significant and valuable contributions that will help to accomplish ABC's goals?
- How many members have provided letters of commitment?
- Are there a significant number of members from NYS organizations?

Focus Area and Proposed Products and Practices

- How unique is the proposed focus area from other existing consortiums/centers supporting buildings?
- Are there existing NYS manufacturers that would benefit from the ABC activities in proposed focus area?
- Do the proposed products and practices being developed address market needs?
- Can the proposed products and practices be developed with the provided funding?
- Will the proposed products and practices produce energy benefits for a large number of NYS buildings in the short to mid-term time frames?
- Will the proposed products and practices lead to improved resiliency of NYS buildings to interruptions of the electric grid?
-

Detailed Research Plan

- How reasonable are the Plan's activities for accomplishing the goals of the ABC's focus area?
- Are available funds being used in appropriate amounts across the activities?
- Are activities in the Plan being performed by individuals with the appropriated skills and qualifications?
- Does the Plan exhibit appropriate review and control mechanisms to ensure activities produce their expected outcomes for the funding allocated?

Costs and Cofunding

- Is the overall cost justified by the anticipated benefits?
- Are milestone payments reasonable and do they occur at logical points throughout the entire length of the project?
- Are overhead and G&A rates reasonable?
- Are equipment, facility, material, and travel costs based on reasonable estimates?
- Are the labor rates reflective of the industry?
- Is 25% or more cofunding identified to support ABC activities? (cofunding levels significantly greater than 25% will receive higher scores)
- How is cofunding distributed across the ABC's years of anticipated operation?
- Is a significant portion of the cofunding as cash from a third party (proposals with significant cash cofunding will receive high scores than proposals with in-kind cofunding)?

Assistance Program, Outreach Activities and Other Services

- Is an effective approach proposed for delivering the assistance program to members?
- Does the preliminary list of the researchers and technical consultants identified for providing the services envisioned for the assistance program appear to have the necessary qualifications and experiences?
- Would the proposed conference and workshop themes appear to be of interest to consortium members and technical individuals who were not consortium members?
- Are there any other valuable services and technical assistance that the consortium plans to offer members and the buildings industry described?

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

V. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSEDA 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://nysesda.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
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 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 (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** in approximately eight weeks from the **proposal due date** whether your short **proposal** has been selected for submission of a full proposal. 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 – submit with Short Proposal only
Attachment A-1	Proposal Checklist – submit with Full Proposal only
Attachment A-2:	Acceptance of Standard Terms and Conditions – submit with Full Proposal only
Attachment B:	Disclosure of Prior Findings of Non-responsibility Form – submit with Short and Full Proposals
Attachment C:	Scope of Work Template - for Full Proposal only
Attachment D:	Contract Pricing Proposal Form - submit with Full Proposal only
Attachment E:	Sample Agreement (Not included in proposal submission)
Attachment F:	Sample Metrics Reporting Guides (Not included in proposal submission)