Request for Proposals NASEO Codes and Energy Resilience Solicitation Number: NASEO-2024-RFP-005

Released: December 13, 2024
Responses Due: January 17, 2025 at 4:59 p.m. ET

National Association of State Energy Officials 1300 17th Street North, Suite 1275 Arlington, Virginia 22209 <u>Note on applicants' eligibility:</u> All applicants must meet the <u>DOE Mandatory Requirements and Standard Provisions</u>. This includes having a current registration in SAM.gov and providing assurance that applicant is not a debarred or suspended entity.

I. Introduction and Background

Building science research and post-disaster investigations have found that modern building codes make buildings more resistant to hazards including high winds, wildfire, seismic events, and other hazards. The National Institute of Building Sciences found that every \$1 invested in adopting building codes results in \$11 of benefit. The contribution of building energy codes (a chapter of the building code) to these benefits is less well understood. Many State and Territory Energy Offices (hereafter "State Energy Offices") lead or support significant building energy codes activities. As states and localities consider options for altering their building codes to meet their building safety, energy, and other performance objectives, the National Association of State Energy Officials (NASEO) seeks to provide State Energy Offices with information and tools to help them understand, evaluate, and advance the resilience cobenefits of building codes.

With funding from the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE), NASEO seeks a *Consultant* to support this effort by working with NASEO and members of the NASEO Buildings Committee to develop two written deliverables. The *Consultant* will (1) create an *Inventory* of existing state and local energy efficiency and resilience codes, including stretch codes, and (2) develop an *Energy Efficiency and Energy Resilience Code Evaluation Rubric Toolkit* for use by State Energy Offices. The *inventory* and *Rubric Toolkit* will focus on low-rise residential building codes (buildings covered by the International Residential Code).

For the purpose of this RFP, NASEO will use the definition of resilience provided by the DOE Building Energy Codes Program: "Energy resilience is the ability to operate building energy services, such as heating, cooling, ventilation, critical plug loads, and shelter, during and in response to a major disruption." In addition, we reference DOE's description of Passive Survivability "The ability to maintain safe indoor conditions in the event of extended energy outage or loss of energy supply. In practice, passive survivability enables safe indoor thermal conditions, relying on building design measures that require no energy. As a measure of a building's thermal performance, passive survivability offers an integrated assessment of both energy efficiency and resilience." For the purpose of this RFP, NASEO is interested in building codes that support both energy resilience and passive survivability.

II. Deliverables

The Consultant will develop two deliverables. One deliverable is an *Inventory* of existing code measures that improve energy efficiency, energy resilience, and passive survivability while providing hazard resistance benefits, and the second is a *Toolkit and Rubric* for evaluating code changes to enable State Energy Offices to analyze the efficacy and value proposition of code changes to meet state energy efficiency and resilience goals.

The *Inventory* will identify examples of existing codes, including stretch codes, in state and local building codes to inform State Energy Offices of ways to improve energy efficiency and energy resilience of buildings in their states. The *Consultant* will create an *Energy Efficiency and Energy Resilience Code Evaluation Rubric Toolkit* that enables State Energy Offices to evaluate energy code amendments to support state emission reduction, resilience, and energy efficiency policy goals, including code adoption.

The first deliverable, the *Inventory*, will identify examples of existing code language in state and local building codes, including stretch codes, that can be leveraged by State Energy Offices to improve energy efficiency and energy resilience of buildings in their states. The identified examples will then be categorized by the type(s) of hazards mitigated and, if available, evidence of their efficacy for promoting efficiency and energy resilience will be included. Effective energy resilience and efficiency measures will be elevated and described in the *Inventory*. Examples will be categorized by building measure type, hazard type the measure is intended to mitigate, how the measure contributes to energy efficiency and resilience, and climate zone(s) where the measure may provide benefits. The measures identified in deliverable one (*Inventory*) will be incorporated into the second deliverable, the *Toolkit and Rubric*.

The *Toolkit and Rubric* for states will provide users with metrics and methods for evaluating the efficacy of building energy code measures for improving efficiency and resilience. The *Toolkit and Rubric* will provide guidance for implementing resilience and energy codes to support state emission reduction, resilience, and energy efficiency policy goals. The *Toolkit and Rubric* will provide guidance on how the code measures identified in the *Inventory* can be evaluated against the hazards faced in a state. The *Toolkit and Rubric* will provide guidance on how climate zone considerations should contribute to evaluation of the energy and resilience benefits of measures. The rubric element of *Toolkit and Rubric* will provide a framework for evaluating code language for co-benefits that support specific state goals, such as resilience to hazards, energy efficiency, and passive survivability.

The *Consultant* will be expected to have knowledge of the programmatic, policy, and economic aspects of building codes, including how building codes can support resilience and passive survivability as defined on page 2. The *Consultant* should be prepared to address cost, resilience, and equity considerations. Finally, the *Consultant* should demonstrate a deep understanding of State Energy Offices' roles, distinct from state regulatory roles, in energy policy and energy code adoption and implementation across the country.

III. Statement of Work, Timeline, and Expected Deliverables

Upon contract ratification, NASEO will host a kick-off meeting with the *Consultant* to discuss approaches to performing the work under this contract and developing the deliverables. The *Consultant* will develop the following two (2) deliverables:

- 1) An *Inventory* of energy efficiency and energy resilience building energy code measures. The *Inventory* will elevate effective measures and identify examples of existing building code language, including energy and stretch codes, from state and local building codes that can be leveraged by the State Energy Offices to improve energy efficiency and energy resilience of buildings in their states. Building energy code measures will be categorized by the hazard mitigated, and provide guidance about which climate zones where the measures may be most beneficial and cost effective. Examples from energy and non-energy sections of the code that promote energy efficiency, passive survivability, and structural or energy resilience (structural measures, for instance; in colder climates, requirements that pipes be insulated; in flood-prone areas, requirements that energy equipment be elevated; etc.) should be included in the inventory.
- 2) An Energy Efficiency and Energy Resilience Code Evaluation Rubric Toolkit for states to assist them to evaluate building code measures that incorporate energy resilience and energy efficiency outcomes in support of state emission reduction, resilience, and energy efficiency policy goals, including code adoption.

The Consultant will work with NASEO to develop the *Toolkit*. The *Toolkit* will detail how energy efficiency and building codes enable buildings to support building level energy resilience functions and make recommendations for how to evaluate changes to building energy and resilience codes. The *Toolkit* should include information about how building codes, including building energy codes, improve structural resilience to a variety of hazards (e.g. hurricanes, wildfires, extreme heat and cold) and survivability in long term power outages in extreme weather (e.g. hours of safety).

The Energy Efficiency and Energy Resilience Code Evaluation Rubric Toolkit will also include a Rubric to provide a structure for evaluation of code measures against factors such as hazards present in a state, as well as alignment with state energy, resilience, economic, and emission reduction goals.

The Rubric will be based on:

- state emission reduction, resilience, and energy efficiency policy goals, including code adoption and workforce training
- the type of hazard faced in different areas of the United States, including extreme heat and cold, high winds, hurricanes, and wildfire.

The Rubric will include:

- **Performance metrics and evaluation:** Discuss metrics, data, and frameworks needed to evaluate the performance, costs, and benefits of code amendments.
- Examples of code language to support energy resilience and efficiency: Provide example language from state codes and stretch energy codes that improve energy efficiency, passive survivability, and energy resilience in accordance with the resilience definition established by U.S. DOE.
- Guidance for evaluating the value proposition of adopting codes in the context of energy resilience, including how codes may benefit homes in different types of locations (rural vs. urban/suburban), or of difference income levels, etc.

The report should also examine public safety, health, and energy access benefits, outlining existing literature and studies around benefits afforded by resilient buildings as a disaster mitigation mechanism, and examine how state energy code policies and programs can incorporate elements to support improved resilience.

The final written *Inventory* will be an Excel spreadsheet linking identified examples, and the final written *Toolkit* should not exceed 20 pages (not including citations).

The two resources should be written for State and Territory Energy Offices as the primary audience. Secondary audiences for the deliverable content may include State building departments, state licensing agencies, State Hazard Mitigation Officers, and State Resiliency Officers. Content should clearly outline specific actions and best practices for State Energy Offices and include any relevant graphics, tables, or maps.

Project Schedule (Estimated)

Task	Estimated Deliverable Date*
Kickoff Meeting with NASEO Staff (and possibly	Within 14 days of contract ratification
relevant State Energy Offices)	
Status update meetings	Biweekly
Close out meeting	30 days after inventory and toolkit release
Inventory	
Outline	15 days after kickoff meeting
Review Draft	60 days after kickoff meeting
Final Draft	90 days after kickoff meeting
Toolkit	
Outline	15 days after kickoff meeting
Review Draft	60 days after kickoff meeting
Final Draft	90 days after kickoff meeting
Presentation slide deck describing the Report and	
Toolkit	
Review Draft	14 days after final draft of Toolkit and Report
	accepted by NASEO
Final Draft	30 days after final of Toolkit and Report draft
	accepted by NASEO

^{*} The deliverable timeline may change depending on timeliness of internal and external review. Final document review by DOE may also delay final deliverable date.

The *Consultant* will develop drafts of the *Inventory* and *Toolkit and Rubric* to be reviewed and commented on by NASEO, DOE, and NASEO members (to be identified and engaged in partnership with NASEO). Based on the comments, the *Consultant* will update the drafts and prepare a final version for NASEO (in MS Word format). Upon approval, the *Consultant* will finalize the *Inventory* and *Toolkit and Rubric* for subsequent publication and distribution by NASEO. The *Consultant* does not have the right to reproduce, utilize portions of, or publish the material from the written deliverables without NASEO's express written permission. Consultant shall provide NASEO with all relevant graphics files. NASEO will prepare and release the final publication document.

IV. Period of Performance

This project is estimated to last from March 1, 2025 to July 31, 2025.

V. Project Budget

The proposed project budget should reflect a times and materials consulting agreement. This is a competitively bid project; costs should be feasible and prudent. The *Consultant* must submit cost proposals by task for the entire Statement of Work using the DOE EERE budget justification spreadsheet which is a separate file available for download <u>from DOE's website</u>. NASEO may request changes to the proposal if the proposed scope exceeds the available budget.

Compensation

The *Consultant* shall invoice monthly for actual work completed. *NASEO* shall reimburse the *Consultant* for actual milestones achieved and hours spent in the execution of the work (not to exceed the total approved task budget shown in the final contract agreement) once NASEO has received payment from DOE. The *Consultant* will submit a monthly invoice (along with supporting time records for personnel hours) and progress report by the fifteenth of each month of the agreement.

Rejection of Proposals and Incurred Costs

This Request for Proposals (RFP) does not obligate NASEO to award an agreement. All costs incurred in response to this RFP are the responsibility of the respondent.

NASEO reserves the right to reject any or all submitted proposals not in conformance with this RFP, or for other causes. NASEO reserves the right to request new proposals or to cancel all or part of this solicitation.

VI. Contract Requirements

The funds for this work have been provided through a cooperative agreement between NASEO and DOE's Building Technologies Office (within the Office of Energy Efficiency and Renewable Energy). The underlying terms and conditions of the cooperative agreement between DOE and NASEO will be provided to the *Consultant* and incorporated in the awarded subcontract. All requirements of the DOE contract shall be controlling, including, but not limited to, federal reporting and the propriety and form of expenses and costs. The contract shall be issued following approval from DOE and will become effective when signed and dated by NASEO and the *Consultant*.

VII. Responding to the RFP

Please submit responses to the RFP to Ed Carley by e-mail at ecarley@naseo.org. RFP responses are due no later than January 17, 2025 at 4:59 p.m. ET. Any questions on the RFP should be directed to Ed Carley by e-mail at ecarley@naseo.org no later than January 6, 2025 at 11:59 p.m. ET. All questions received and answers will be posted to the NASEO RFP website.

Responses shall include and fully address the following:

- Cover letter (should include the following):
 - Unique Entity Identification Number
 - SAM.gov registration expiration date
 - Assurance that applicant is not a debarred or suspended entity
 - Assurance that applicant complies with laws and regulations governing nondiscrimination in federally assisted programs
- Resumes (please identify any foreign nationals included in the proposal)
- Description of relevant experience including prior work on energy resilience policy and building energy codes as well as working with relevant state agencies (in particular with State Energy Offices)
- Proposed approach and treatment of the tasks with a view toward expected deliverables
- Proposed Budget by Task Deliverables
 The budget should be completed using the <u>DOE EERE budget justification spreadsheet</u>. Please note that there is no cost-share requirement, applicants can use either the 3-year or 5-year budget justification and add all costs for their proposal under Budget Period 1.

Please limit the cover letter, the description of relevant experience, and the narrative that addresses the proposed approach and development of the project tasks and proposed budget to **6 pages in 11-point font**. Resumes and the proposed budget do not count toward the page limit.

Note: Late proposals will not be accepted.

VIII. Consultant Selection and Required Qualifications

NASEO will select a *Consultant* through a competitive selection, which will include consideration of the following:

- Experience working with State Energy Offices or other relevant state agencies.
- Relevant experience working on programmatic, policy, economic, and community aspects of building energy codes. The *Consultant* should be prepared to address cost, resilience, and equity considerations.
- Competitive budget proposal.
- Quality of academic and professional experience in relevant field.
- Flexibility of availability.

The NASEO Evaluation Team will use the following criteria in assessing all responses to this RFP:

Administrative (applicant must meet these requirements for NASEO to review the proposal)

- Unique Entity Identification Number.
- Current SAM.gov registration.
- Assurance in writing that applicant is not a debarred or suspended entity.
- Assurance that applicant complies with laws and regulations governing non-discrimination in federally assisted programs

Technical Experience and Applicant Qualifications (30% of total score)

- Relevant experience in proposed topics in the energy and building sector, particularly working with State Energy Offices and other state agencies.
- Adequate level of technical knowledge to meet the demands of the project.
- Quality of academic and professional experience in relevant field.

Proposed Approach for Implementation (40% of total score)

- Proposal responds to the outlined topics in the RFP.
- Existing resources / consultant availability to meet needs of flexible deployment.
- Overall quality and professionalism of the proposal (well written, structured and organized) and materials are provided in the format requested.

Budget (30% of total score)

- Given the scope, is the estimated cost of the proposal appropriate?
- Does overall cost reflect an efficient value for the level of effort?
- Is the level of effort for each task appropriate?

¹ Multi-Hazard Mitigation Council (2019.). *Natural Hazard Mitigation Saves: 2019 Report*. Principal Investigator Porter, K.; Co-Principal Investigators Dash, N., Huyck, C., Santos, J., Scawthorn, C.; Investigators: Eguchi, M., Eguchi, R., Ghosh., S., Isteita, M., Mickey, K., Rashed, T., Reeder, A.; Schneider, P.; and Yuan, J., Directors, MMC.

Investigator Intern: Cohen-Porter, A. National Institute of Building Sciences. Washington, DC. https://www.nibs.org/files/pdfs/NIBS MMC MitigationSaves 2019.pdf.

[&]quot;U.S. Department of Energy. Energy Resilience. https://www.energycodes.gov/energy-resilience