

U.S. General Services Administration  
Public Buildings Service  
Office of Facilities Management

U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy

# **RFI Response Questions**

**GSA Proving Ground Program**

**Date: October 5, 2020**

# RFI Response Questions

## Section 1. Applicant Information

- [Applicant Company]
- [Company Address]
- [Company City]
- [Company State]
- [Company Zip Code]
- [Applicant Name]
- [Applicant E-mail]
- [Phone Number]
- **Funding: Unconditional gift to GSA?** To be considered for field validation at a federal facility, technology must be provided as an unconditional gift of property under GSA's gift acceptance authority (40 U.S.C. § 3175). If selected for testing and evaluation, do you agree to donate unconditionally at no cost to GSA your submitted technology in sufficient quantity to test and evaluate its performance? (Yes/No)

## Section 2. Solution Overview

- **Descriptive Title:** Provide an informative descriptor of your solution. The title you submit will be broadly used by the review team when discussing your solution. Please do not use a product name for the title. (Limit 50 characters)
- **Executive Summary:** Provide an "elevator pitch" or "30,000 foot view" that broadly characterizes the use case, value proposition and market space for this solution, and gives an overview of the innovation. (Limit 1,000 characters)

## Section 3. Technical Attributes of the Solution

- **Use Case and Innovation:** Specify the use case that the proposed technology solution addresses. Describe the innovation and performance improvement relative to current capabilities. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)
- **Functionality:** Describe the technology solution in sufficient detail to establish an accurate understanding of how the solution maintains or improves resource efficiency (e.g., energy and water), indoor environmental quality, passive survivability (describe duration of resilience event), or facility operations during periods of resource disruption, or any combination of the foregoing, and how the solution is superior to incumbent solutions. A schematic is encouraged as supporting documentation. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)
- **Impacts:** Describe required interaction with and potential impacts on building occupants, facility operations and facility systems during a disruptive event. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)
- **Required Building Systems:** Describe all facility characteristics, systems and components that are needed for the solution to work as intended during a disruptive event. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

## Section 4. Test Bed

- **Technical Attributes:** Identify building and geographical or other characteristics that will best support a conclusive real-world validation of the proposed technology solution. If a specific recommended commercial or federal test bed location is part of your submission, explain why this facility is ideal, and attach any documentation supporting the facility's commitment to participation. Characteristics may include recommended climate zone(s), envelope or mechanical system attributes, on-site energy production or storage capabilities, or both, facility operating hours, energy load profile, utility tariffs, or any other relevant factors. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

- **Technical risks:** What potential risks or issues, including cybersecurity, interoperability with existing platforms or devices, and acceptance by facility operations and maintenance staff or building occupants, or both, could prevent the solution from operating or performing as intended, and how can these risks and issues be mitigated? If there are any other risks or issues that could have a negative impact on a conclusive field validation, discuss how these risks and issues should be managed. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

- **Laboratory or validated performance data:** Cite or submit links to any studies by independent researchers that document the performance of any aspects of the solution in a controlled setting. Provide links to supporting documents in the “Supporting Documents” section of your response. Identify relevant sections of those documents here. If laboratory or validated performance data is not available for aspects of your solution, where possible, provide any other independent experience pertaining to the solution performance. Where applicable, if this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

- **Details about the project team:** Provide detailed information about the members of your team who will be engaged during the formulation and execution of this field validation. If your teaming arrangement includes multiple entities, include information about the team structure and capabilities each member brings to the team, and describe any past working relationships between teaming members. (Limit 2,500 characters)

## Section 5. Commercialization

- **What is the potential for this technology to reach wide-scale deployment?** Outline key technical attributes and targeted building types that would enable the proposed solution to be deployed on a widespread scale cost effectively. If technology is pre-commercial, describe your “go to market” strategy. If the technology solution is included in any utility incentive program or has been included in any project funded through an energy savings performance contract or alternative financing arrangement, or any combination of the foregoing, please describe. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

- **What barriers to market adoption will field validation address?** Describe specific quantitative and qualitative metrics and indicators of successful performance that field

evaluation will validate. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

- **Energy:** Provide estimated annual energy reduction, generation and energy cost savings impact compared to the incumbent solution. Quantitative metrics included in this section include a reduction in annual energy consumption, a reduction in peak demand loads or estimation of how much energy can be stored or supplied at a range of service levels during a resilient event, or any combination of the foregoing. Scenarios can be based on real-world deployment data or developed through modeled performance/cost/adoption data. If the efficiency benefit is limited to specific resilience scenarios, describe the relevant scenario and any factors affecting the realization of the efficiency benefit. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

- **Return on Investment:** Provide annotated calculations of simple payback and (optional) life-cycle cost or savings-to-investment ratio. Calculations can include alternative scenarios of mature market technology pricing, retrofit/new construction or optimum/minimum appropriate deployment, utility tariffs, or any combination of the foregoing. Calculations included without clear references or the basis of assumptions will not be evaluated. If this section contains proprietary or confidential information, please identify as “Privileged and Confidential Communication.” (Limit 2,500 characters)

- **Ongoing Costs:** Describe requirements for effective ongoing operation. This should include a description of required maintenance, any associated fees (such as software as a service fees), training, and any other needed support (Limit 2,500 characters)

## Section 6. Attachments

- **Supporting documents:** Provide hyperlinks to web resources that help explain your solution or parts of your solution (e.g., demonstration videos, cut sheets, press, studies, or published findings or reports). If possible, please provide a single slide that provides an overview of your solution. If possible, this slide should not contain privileged and confidential information. If your solution has control software, web-based components or mobile device applications, provide screenshots of the user interface here. Identify specific sections of the web resources (page number or paragraphs) where relevant material is located. All supporting documentation must be available using URL through a hosted domain or cloud-based file sharing. Please do NOT share through Dropbox.

- **How did you hear about this RFI? Had you heard previously about the GPG program or the DOE program, or both? If so, when and how?**

### **Q1**

This Request for Information (RFI) seeks innovative, pre- or early commercial building technologies that can cost-effectively transform the operational efficiency of federal and commercial buildings. The performance of technologies selected as a result of this RFI will be validated in occupied, operational buildings.

Responses to this RFI will be evaluated and considered for inclusion in the U.S. General Services Administration (GSA) Proving Ground (GPG) program and/or the U.S. Department of Energy (DOE) High Impact Technology (HIT) Catalyst. Please visit the [GPG](#) and [HIT](#) websites for additional information about each of these programs.

Responses will be accepted through December 9, 2019.

Throughout this form, the word “technology” refers broadly to integrated systems based on any combination of hardware (equipment), software (processing), materials engineering processes, and resource management devices, methods, tools, or models based on scientific or engineering principles. “Pre-commercial technology” is defined as technology that is not yet fully available on the open market and has a value proposition or price that is still being defined. “Early commercial technology” is defined as technology whose value and risks are understood by specialists for some applications but the supply chain and/or full-scale production have not yet been fully established.

**Note that all fields are required. Any submission deemed to contain insufficient content for thorough evaluation will be eliminated from consideration.**

### **Q2**

Please provide the following details about your company:

Applicant Company

Company Address

Company City

Company State

Company Zip Code

### Q3

Please provide the following personal details:

Applicant Name

Applicant Email

Applicant Phone Number

### Q4

#### Descriptive Title:

Provide an informative descriptor of your GEB solution. The title you submit will be broadly used by the review team when discussing your GEB solution. Please do not use a product name for the title. (Limit 50 characters)