



FY25 RFI for Emerging Technologies for Net-Zero Carbon Buildings

U.S. General Services Administration

Center for Emerging Building Technologies (CEBT)
Green Proving Ground Program (GPG)

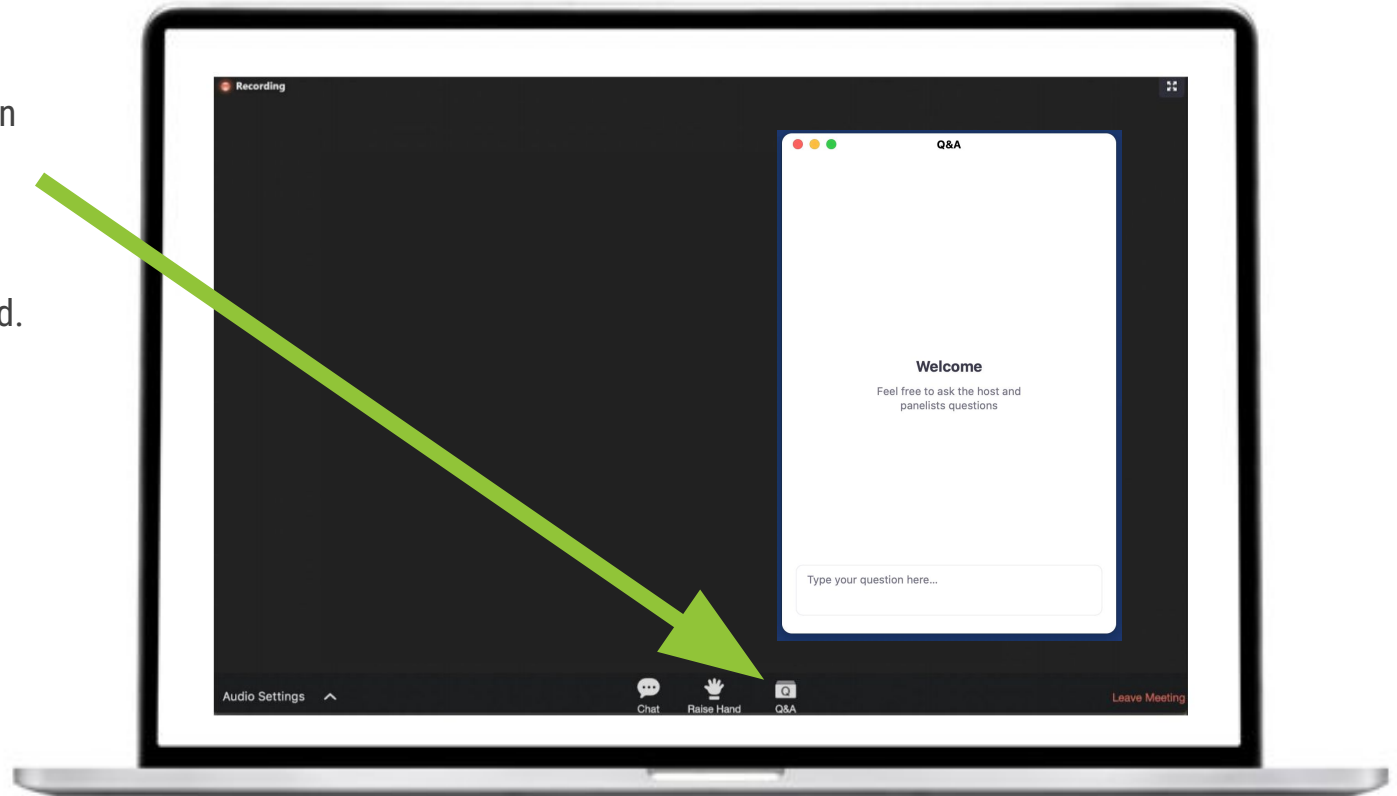
U.S. Department of Energy

Office of Energy Efficiency and Renewable Energy (EERE)
Building Technologies Office (BTO)
Solar Energy Technologies Office (SETO)
Federal Energy Management Program (FEMP)

»» How to Ask Questions

Click the Q&A button to ask questions.

The webinar will be recorded and shared.



»» Frequently Asked Questions

Answers to frequently asked questions are available at gsa.gov/gpgrfi and will be updated after today's webinar.

If your question is not answered in this document, please send to gpg@gsa.gov



Frequently Asked Questions

GSA/DOE RFI for Emerging Technologies for Net-Zero Carbon Buildings

- » General Information
- » Benefits of Participation
- » Technology Eligibility
- » Program Eligibility
- » Program Participation
- » Financial Expectations
- » Measurement and Verification
- » Testbed Selection
- » RFI Application Help

» Webinar Recording and Slides available on gsa.gov

This webinar is being recorded.

The recording and slides will be shared by email and posted on the RFI page at gsa.gov/gpgrfi.

The screenshot shows the GSA website page for the 'Pilot Your Emerging Tech at GSA: FY25 RFI'. The page includes a navigation menu with categories like 'Buy through us', 'Sell to government', 'Real estate', 'Policy and regulations', 'Small business', 'Travel', 'Technology', and 'About us'. The breadcrumb trail is 'Home > Climate Action and Sustainability > Center for Emerging Building Technologies > Pilot Your Emerging Tech at GSA: FY25 RFI'. The main content area features a sidebar with links to 'Overview', 'About Green Proving Ground', 'Completed Assessments', 'Ongoing Assessments', 'Benefits to Participating', 'About Pilot to Portfolio', 'GPG webinars', 'About Applied Innovation Learning Lab', and 'GSA Technology Deployment Maps'. The main heading is 'Pilot Your Emerging Tech at GSA: FY25 RFI'. A highlighted box contains the text: 'FY25 GSA, DOE RFI open August 1 - September 13, 2024. An informational webinar is scheduled for August 22, 2024 at 1:00 pm ET.' Below this, there are two paragraphs of text: 'The Green Proving Ground (GPG) RFI seeks innovative, emerging, and sustainable technologies that enable energy efficiency and decarbonization in commercial buildings and contribute to a more efficient electric infrastructure.' and 'Technologies selected for the GPG program will be piloted in one or more federal buildings and/or private sector facilities and evaluated by DOE National Labs. The RFI will be open from August 1 to September 13, 2024.' A 'Participation Requirements' section lists three bullet points: 'Technologies should be early- or underutilized-commercial and ready for evaluation in occupied, operational buildings.', 'For GSA-selected technologies, core equipment must be gifted to the federal government as outlined in 40 U.S.C. 3175 or provided via an alternative financing mechanism. Installation is funded by GSA.', and 'For DOE-selected technologies, project costs are negotiated with the vendor and host site partners.' On the right side, there is a 'GPG RFI Materials' section with links to 'GSA Solicitation #FY25RFI080124', 'Web-based Application', 'Application (for reference) [PDF]', 'GSA Press Release', 'Register for webinar' (scheduled for August 22, 2024 at 1:00 pm ET), and 'Frequently Asked Questions [PDF]'. At the bottom right, there is a 'Get GPG program updates' section with a 'Subscribe to the GPG mailing list' button and an 'Email address' input field with a 'Go' button.

GSA U.S. General Services Administration

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Home > Climate Action and Sustainability > Center for Emerging Building Technologies > Pilot Your Emerging Tech at GSA: FY25 RFI

Center for Emerging Building Technologies

- Overview
- About Green Proving Ground
- Completed Assessments
- Ongoing Assessments
- Pilot Your Emerging Tech at GSA: FY25 RFI**
- Benefits to Participating
- About Pilot to Portfolio
- GPG webinars
- About Applied Innovation Learning Lab
- GSA Technology Deployment Maps

Pilot Your Emerging Tech at GSA: FY25 RFI

FY25 GSA, DOE RFI open August 1 - September 13, 2024.
An informational webinar is scheduled for August 22, 2024 at 1:00 pm ET.

The Green Proving Ground (GPG) RFI seeks innovative, emerging, and sustainable technologies that enable energy efficiency and decarbonization in commercial buildings and contribute to a more efficient electric infrastructure.

Technologies selected for the GPG program will be piloted in one or more federal buildings and/or private sector facilities and evaluated by DOE National Labs. The RFI will be open from August 1 to September 13, 2024.

Participation Requirements

- Technologies should be early- or underutilized-commercial and ready for evaluation in occupied, operational buildings.
- For GSA-selected technologies, core equipment must be gifted to the federal government as outlined in 40 U.S.C. 3175 or provided via an alternative financing mechanism. Installation is funded by GSA.
- For DOE-selected technologies, project costs are negotiated with the vendor and host site partners.

GPG RFI Materials

- [GSA Solicitation #FY25RFI080124](#)
- [Web-based Application](#)
- [Application \(for reference\) \[PDF\]](#)
- [GSA Press Release](#)
- [Register for webinar](#) scheduled for August 22, 2024 at 1:00 pm ET
- [Frequently Asked Questions \[PDF\]](#)

Get GPG program updates

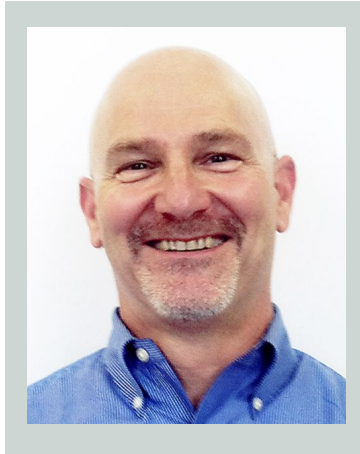
Subscribe to the GPG mailing list

Email address

»» Agenda

- Program Overview
- What Are We Looking For?
- RFI Mechanics and What it Means to Participate
- Q&A

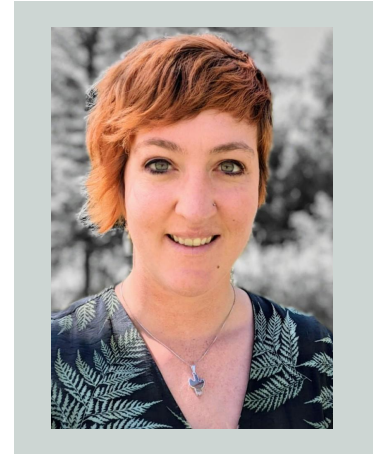
»» Today's Presenters



Kevin Powell
GSA



Kassie Grimes
DOE



Cedar Blazek
GSA



Green Proving Ground Program (GPG)

»» Net-Zero Carbon Buildings

Open August 1st through September 13th

This year's RFI is focused on emerging and sustainable technologies that support:

- Deep Energy Retrofits
- All-Electric Buildings and All-Electric Vehicle Fleets
- Healthy and Resilient Buildings
- Low Embodied Carbon Building Materials
- Net-Zero Operations
- Packages of Emerging Technology Solutions



U.S. DEPARTMENT OF
ENERGY

GSA

GSA & DOE Seek Emerging Building Technologies

The U.S. General Services Administration (GSA), in collaboration with the U.S. Department of Energy (DOE), has issued a Request for Information (RFI) for emerging technologies that help buildings achieve net-zero operations.

Annual RFI closes on
FRIDAY, SEPTEMBER 13, 2024

Benefits to Participating

Technologies selected for participation in GSA's Green Proving Ground (GPG) will be piloted in one or more federal buildings and/or private sector facilities for evaluation by DOE national labs. Evaluations inform public- and private-sector investment decisions, accelerating commercialization as well as adoption.

2025 GPG RFI Technology Focus Areas

- » Deep energy retrofits
- » All-electric buildings and vehicle fleets
- » Healthy and resilient buildings
- » Low embodied carbon building materials
- » Net-zero operations
- » Packages of emerging technology solutions



Scan for RFI
information and
application

gsa.gov/gpgrfi ggg@gsa.gov

- 
- » Single largest U.S. portfolio of commercial office space
 - » Large urban buildings (90% > 100,000 ft²) with central plants
 - » 80% in mild climates (ASHRAE 3, 4, 5)

1,500+
owned properties

8,100+
managed properties

377 M
rentable sq. ft.

Funds to Maximize GSA Building Performance & Minimize GHG Emissions



Assistance for Federal Buildings §60502 (HPGB)

\$250M

available until Sept. 30, 2031

to convert GSA facilities to high-performance green buildings (as defined in Section 401 of EISA)



Use of Low-Carbon Materials §60503 (LEC)

\$2.15B

available until Sept. 30, 2026

to acquire and install materials and products for construction or alteration of GSA buildings that have substantially lower levels of embodied greenhouse gas emissions, as determined by EPA



GSA Emerging Tech §60504 (E&ST)

\$975M

available until Sept. 30, 2026

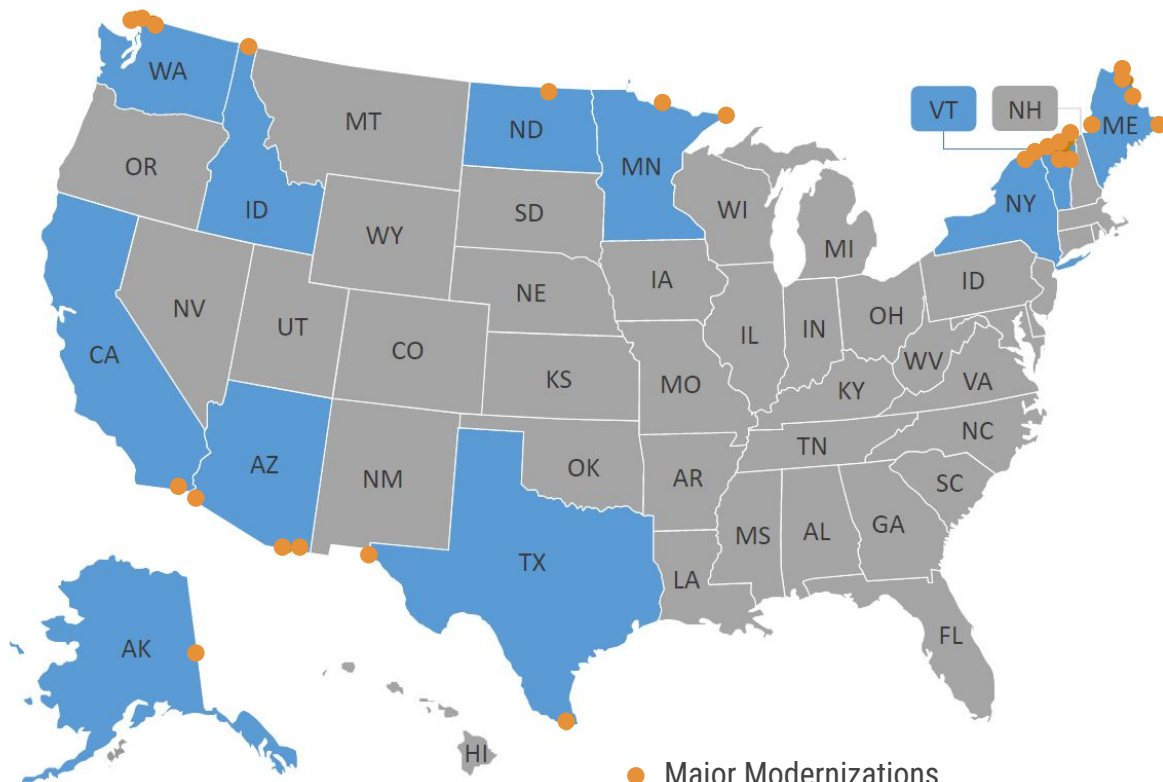
for emerging and sustainable technologies, and related sustainability and environmental programs

» Bi-Partisan Infrastructure Law, 2021

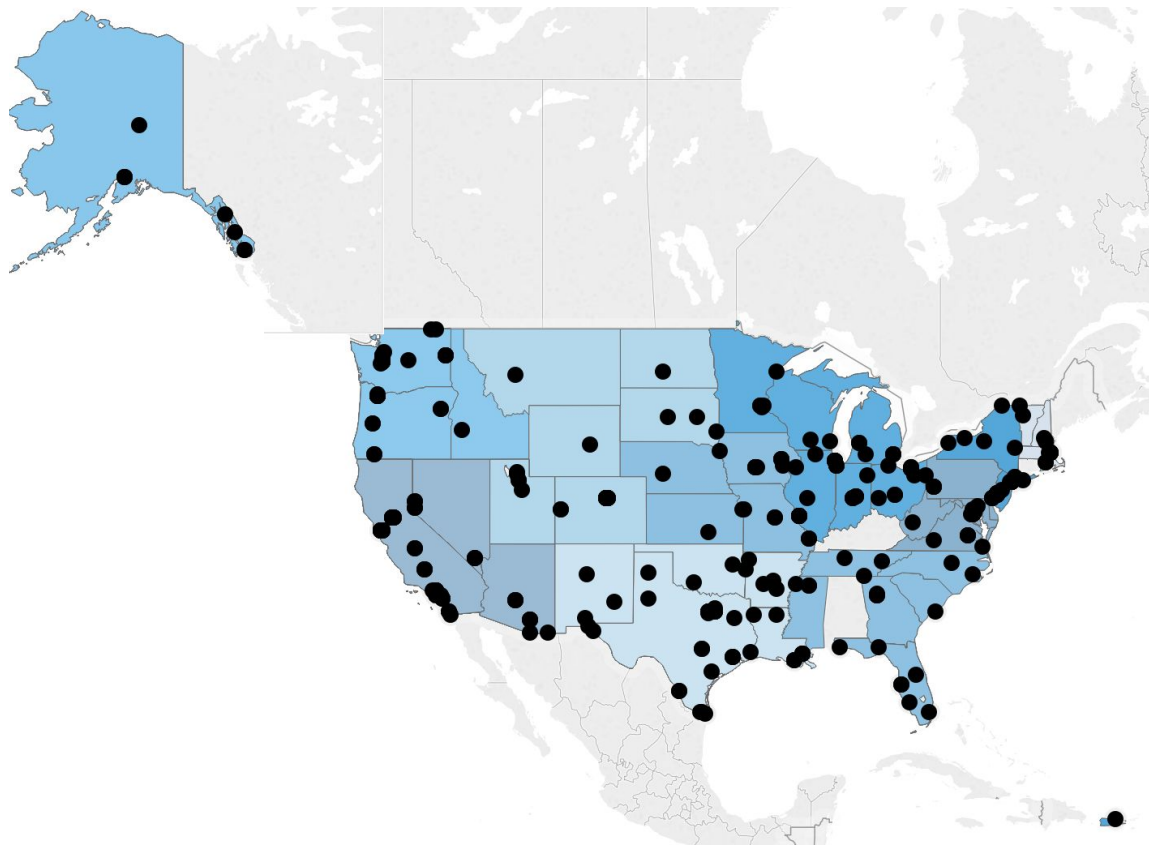
\$3.75B

to modernize
and improve

> 60 LPOEs



» GPG 2010–2024



1,150
technology applications

124
technologies selected

54 reports published

33 GPG technologies
deployed in 700+ facilities

\$28M annual savings

116 tons annual
GHG reduction

» Benefits to Participating in a Testbed Evaluation



Engage in a full-scale pilot with 3rd-party evaluation by DOE National Labs



Increase market acceptance by validating real-world performance



Inform public- and private-sector investment decisions

GSA's Public Buildings facilities standard (P100) requires using at least two GPG-validated technologies in all new projects

Annual Greenovation Summit connects GPG vendors with federal agencies and Energy Service Companies



U.S. DEPARTMENT OF
ENERGY

» Building Technologies Office (BTO)

Better Buildings Partners Are

**FORTUNE
100**

**36 of the
Fortune 100
Companies**



**13% of All
Commercial
Building Space**



**10 of the
Top 25 U.S.
Employers**

BTO Technology Field Validation

Connect national laboratories with technology providers and recruited host sites to provide technical assistance and 3rd party measurement and verification.

BTO Contact: hayes.jones@ee.doe.gov

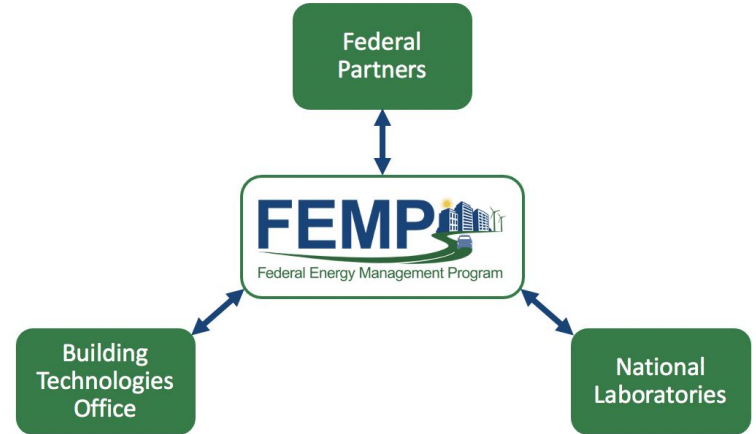
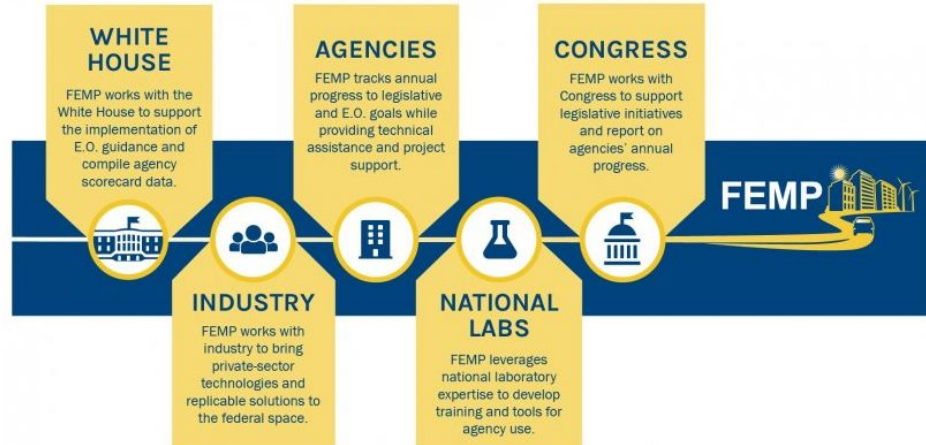


**100
State & Local
Governments**

» Federal Energy Management Program (FEMP)

FEMP Mission

FEMP works with its stakeholders to enable federal agencies to meet energy-related goals, identify affordable solutions, facilitate public-private partnerships, and provide energy leadership to the country by identifying and leveraging government best practices.

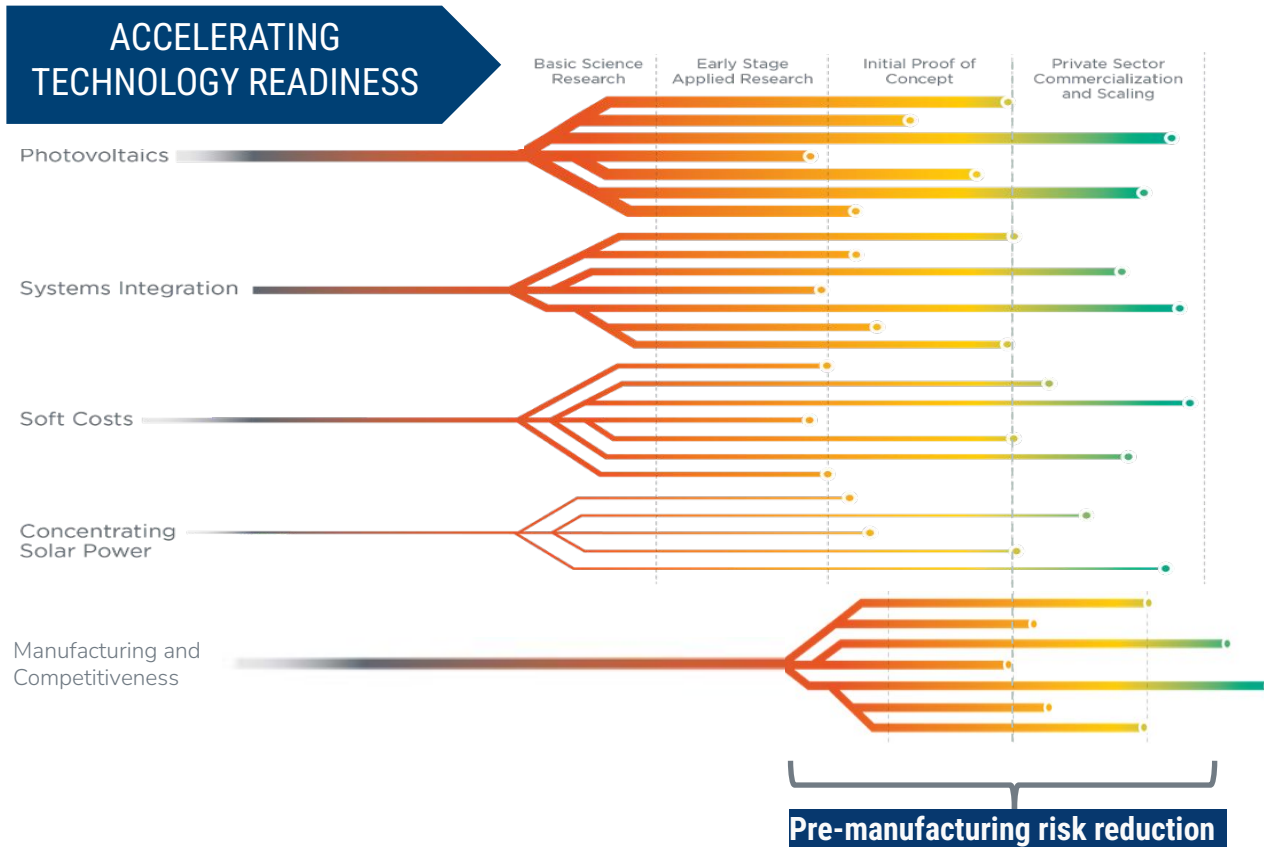


FEMP Technology Validation Role

FEMP facilitates collaboration with DOE, federal partners, and National Laboratories to connect potential validation sites with solution providers.

FEMP Contact: kendall.kam@hq.doe.gov

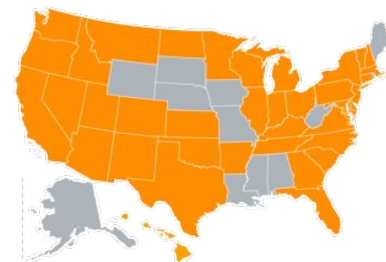
» Solar Energy Technologies Office (SETO)



SETO Manages

>375 Active Projects in
47 States and DC

30% Business/Non-Profit
40% National Labs
30% Universities



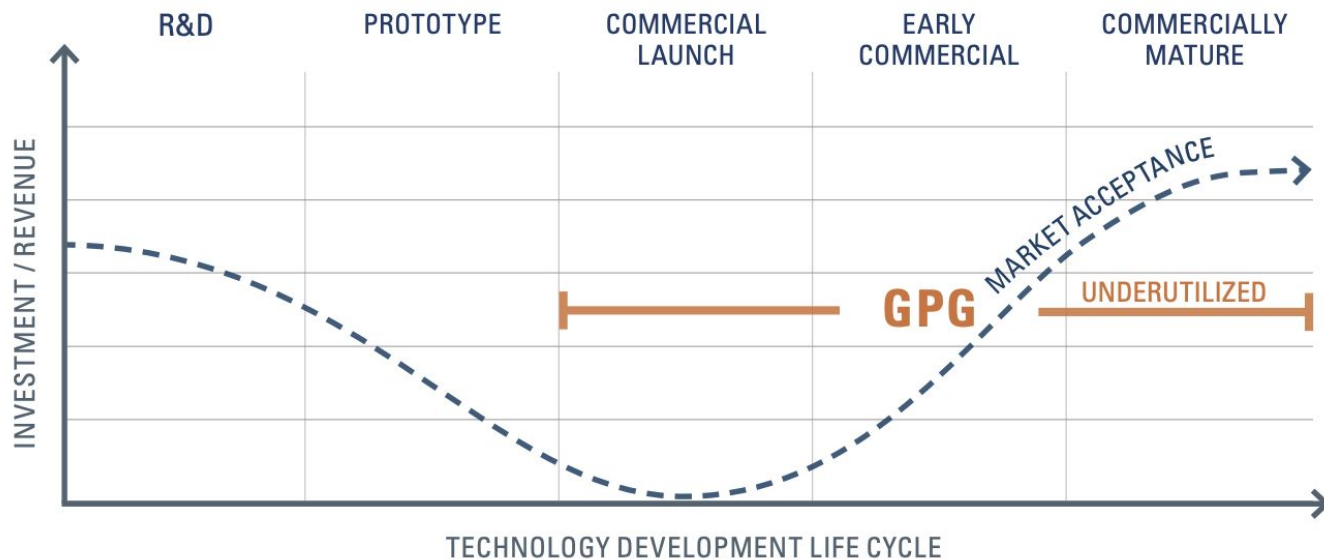
SETO M&C Contact:
timothy.cycyota@ee.doe.gov

What Are We
Looking For?



» RFI: What Are We Looking For?

Technology Maturity—Early or Underutilized Commercial



Technologies should be ready for evaluation in occupied, operational buildings.

Prototypes or commercial technologies broadly in use and readily available are not appropriate candidates.

»» Technology Eligibility

For acceptance into the program, technologies must possess *all relevant health and safety certifications*, which may include but are not limited to:

- Underwriter Laboratories (UL)
- Electrical Testing Laboratories (ETL)
- Federal Risk and Authorization Management Program (FedRAMP)
- Environmental Product Declaration (EPD)
- Health Product Declaration (HPD)

Some technology categories may require additional registrations to be considered eligible:

- PV modules, PV inverters, and consumer electronics: [Electronic Product Environmental Assessment Tool \(EPEAT\)](#)



Technology
Focus Areas



»» Deep Energy Retrofits

Improve energy efficiency and reduce the carbon footprint of an existing building

- Capture and manage waste heat
- Refrigerant leak prevention or no or low global warming potential refrigerants
- Envelope retrofits
- Passive building technologies
- Lighting and lighting control systems
- Enable easier retro- and continuous-commissioning
- Software and hardware that support load flexibility and GEBS



» All-Electric Buildings and Vehicle Fleets

Eliminate the use of fossil fuels in building and vehicle fleet operations

- Larger-scale heat pumps
- Systems approaches to commercial boiler decarbonization
- Packaged heat pumps
- Smart panels and circuits
- Electric vehicle supply equipment



» Healthy and Resilient Buildings

Enhance occupant comfort and building health

- Environmental quality monitoring and control
- Novel methods to reduce the risk of disease transmission
- Enhancing resiliency and passive survivability
- Microgrids
- Water conservation and harvesting technologies



»» Low Embodied Carbon Building Materials

Reduce lifecycle emissions associated with materials used for facility construction, renovation, and reuse

- Low- or no-emissions materials or products
- Solutions that reduce the overall lifecycle carbon emissions of a facility
- Innovative deconstruction and reuse technologies, products, or practices



»» Net-Zero Operations

Operate without fossil-fuel equipment combining on-site renewables and offsite carbon-free electricity

- On-site carbon-free energy generation
- On-site energy storage
- Integrated on-site energy, storage and building management systems
- Simplify or reduce installation, operation and maintenance challenges, workload to enable net-zero facilities



» Packages of Emerging & Sustainable Technology Solutions

Technology stacks or packages that create deeper energy or emissions reductions for a facility or campus

- Support zero carbon emissions and backup generation for data centers or critical facilities
- Long-duration energy storage
- Data collection and management of operational and embodied emissions
- Power optimization measures that reduce peak power in buildings



»» Novel Financing Approaches




If possible, novel financing approaches and/or business models to accelerate uptake of low-carbon technologies are encouraged, and may be integrated into responses to this RFI to streamline and accelerate deployment of the technology or solution.

RFI Mechanics & What it Means to Participate



» Vendors Must Demonstrate Measurable Success Criteria

- Reduce GHG emissions
- Reduce primary energy (including electricity and fuel)
- Enable on-site energy generation (where applicable)
- Achieve reasonable simple payback periods or provide robust value justification
- Demonstrate novel financing approaches (where applicable)



Factors
considered
in selecting
a technology

1. Innovation
2. Performance
3. Costs/Savings
4. Deployment Potential
5. Technical Risk

» Program Participation: Your Contribution

Technology

- GSA – Core equipment for evaluation must be (1) gifted to the U.S. government or (2) provided via alternative financing mechanism (i.e. UESC). Equipment installation will be funded by GSA.
- DOE – Project details and costs will be negotiated between vendor and host site partner.

Time and Travel

- Provide input to labs on test bed design, project plan, and evaluation report.
- Provide guidance on installation, commissioning, and tenant engagement.
- Travel to 1–3 on-site meetings.

Neither GSA nor DOE will provide direct funding to participate in the evaluation

» Path to Procurement and BAA and TAA Compliance

To sell to the federal market you need a path for BAA or TAA compliance

- Executive Order 14005 Ensuring the Future Is Made in All of America by All of America's Workers
- Buy American Act (BAA)
- Trade Agreements Act (TAA)

Foreign companies are eligible to participate in the RFI, but will need BAA/TAA compliance for federal deployment.



» Roles and Responsibilities

Federal Program

- Overall project management
- Coordinate and fund M&V
- Lead report review and publication
- *GPG only: Fund tech installation*

Host Site

- Oversee all contracting
- Manage technology installation
- Facilitate tenant engagement
- Provide user feedback

National Lab

- Design project plan
- Site evaluation
- Collect and analyze data
- Author technical report

Tech Vendor

- Provide technology
- Support design, installation and commissioning
- Provide necessary certifications including UL status
- *For federal: IT-security clearance*

» RFI: Potential Host Sites

DOE

All commercial buildings in the U.S., including privately owned buildings, federal buildings outside of GSA's jurisdiction, and institutional buildings. Vendors that have their own site should note this in the submission.

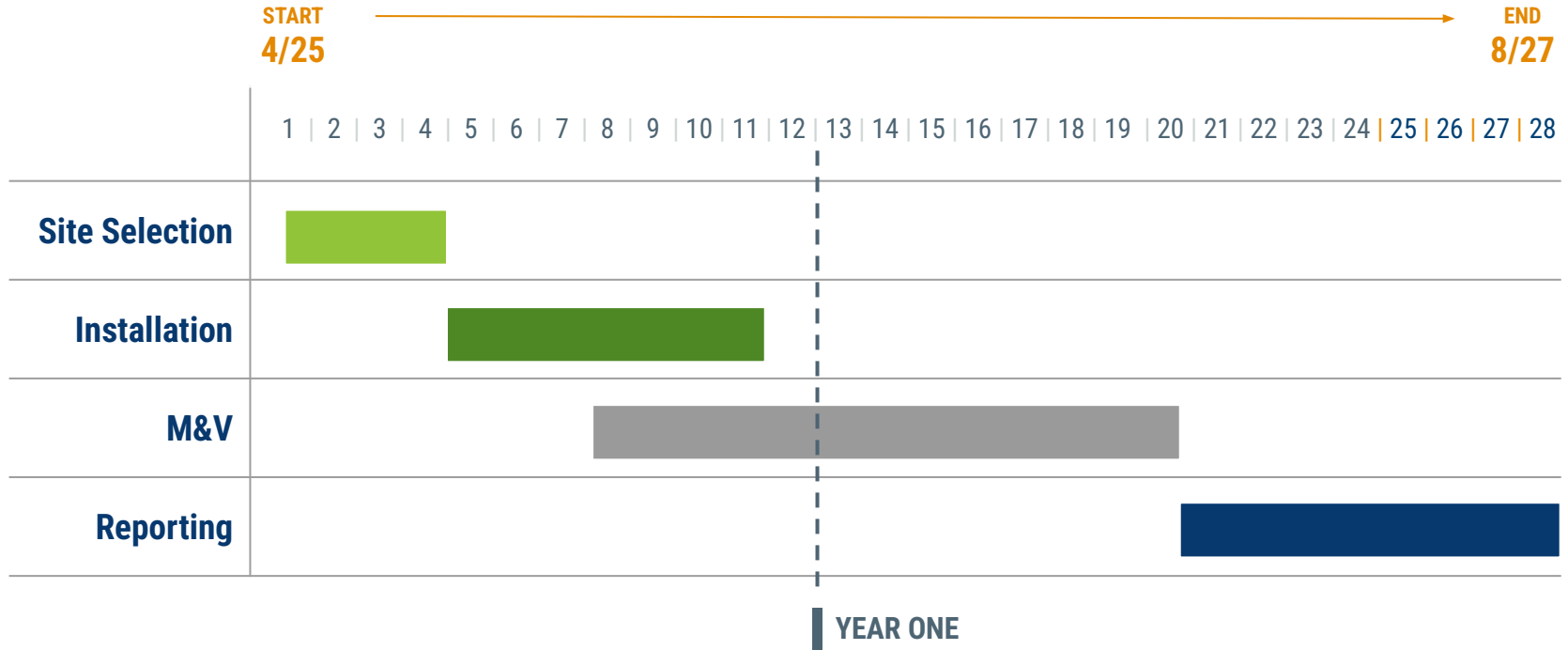
GSA

- Large urban buildings with central plant
 - 90% buildings > 100,000 ft², 80% portfolio energy spend: buildings > 200,000 ft²
- Majority in mild climate zone
 - > 80% in ASHRAE climate zones 3, 4, 5

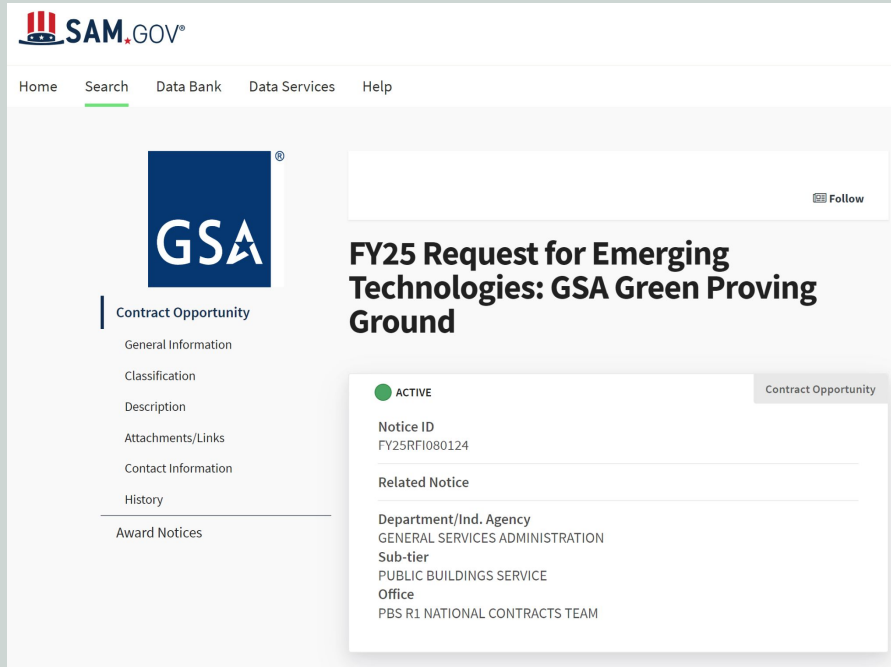
» RFI: Timeline

RFI Opened	August 1, 2024
RFI Informational Webinar	August 22, 2024 @ 1:00 pm ET
RFI Application Deadline	September 13, 2024 @ 11:59 pm ET
Semi-Finalist Notification	December 2024
Semi-Finalist Presentation	February 2025
Finalist Selected and Notified	March 2025

» Assessment Timeline



» RFI: How to Apply Applications Due by Friday, September 13, 11:59 PM EST



The screenshot shows the SAM.GOV website interface. At the top left is the SAM.GOV logo. Below it are navigation links: Home, Search, Data Bank, Data Services, and Help. On the left side, there is a sidebar with a GSA logo and a list of menu items: Contract Opportunity, General Information, Classification, Description, Attachments/Links, Contact Information, History, and Award Notices. The main content area features a large GSA logo and the title "FY25 Request for Emerging Technologies: GSA Green Proving Ground". Below the title, there is a status indicator "ACTIVE" and a "Contract Opportunity" tag. The notice ID is "FY25RFI080124". A "Related Notice" section lists the following information: Department/Ind. Agency: GENERAL SERVICES ADMINISTRATION; Sub-tier: PUBLIC BUILDINGS SERVICE; Office: PBS R1 NATIONAL CONTRACTS TEAM.

[sam.gov # FY25RFI080124](https://sam.gov/#FY25RFI080124)



The screenshot shows the details of the RFI. At the top left is the GSA logo. The title is "GSA/DOE Green Proving Ground Program FY25RFI080124 (Vendor Application)". Below the title, there is a paragraph stating: "This request for information (RFI) seeks innovative early- or underutilized-commercial technologies. Only technologies ready for evaluation in occupied, operational buildings will be considered." Below this, there is a paragraph stating: "Responses to this RFI will be evaluated and considered for one or a combination of the following U.S. General Services Administration (GSA) or U.S. Department of Energy (DOE) programs:" followed by a bulleted list:

- GSA [Green Proving Ground](#) (for federally owned facilities)
- GSA [Applied Innovation Learning Lab](#) (for federally owned facilities)
- DOE [Office of Energy Efficiency & Renewable Energy](#) / Demonstrating Efficient Solutions in Buildings (for privately owned facilities)

 Below the list, there is a paragraph stating: "The application consists of the following five sections:" followed by a numbered list:

1. Applicant Information (7 questions)
2. Technology Overview (16 questions)
3. Technology Performance (12 questions)
4. Technology Commercialization (10 questions)
5. Attachments (1 question)

 At the bottom, there is a section titled "Application Deadline:" with the text: "Responses will be accepted until Friday, September 13, 2024, 11:59 pm EST."

[Web-based RFI application](#)



Q&A





gpg@gsa.gov | gsa.gov/gpgrfi

Applications due by Friday, September 13, 2024 11:59 PM EST



U.S. DEPARTMENT OF
ENERGY