



**WELCOME TO THE**  
**Connected Communities**  
**Data Opportunity**  
**Informational Webinar/  
Objective Strategic**  
**Session (IW/OSS)**

Scan the QR code and visit the  
TechWerx website to learn  
more about this Opportunity





# TechWerx

## A DOE Innovation Hub

*Connecting visionaries, researchers, industry and energy leaders with the opportunities and experts to build the ecosystem, technologies, workforce and infrastructure to enable an equitable and resilient energy transition.*

Scan the QR code and visit the TechWerx website to learn more about this Opportunity



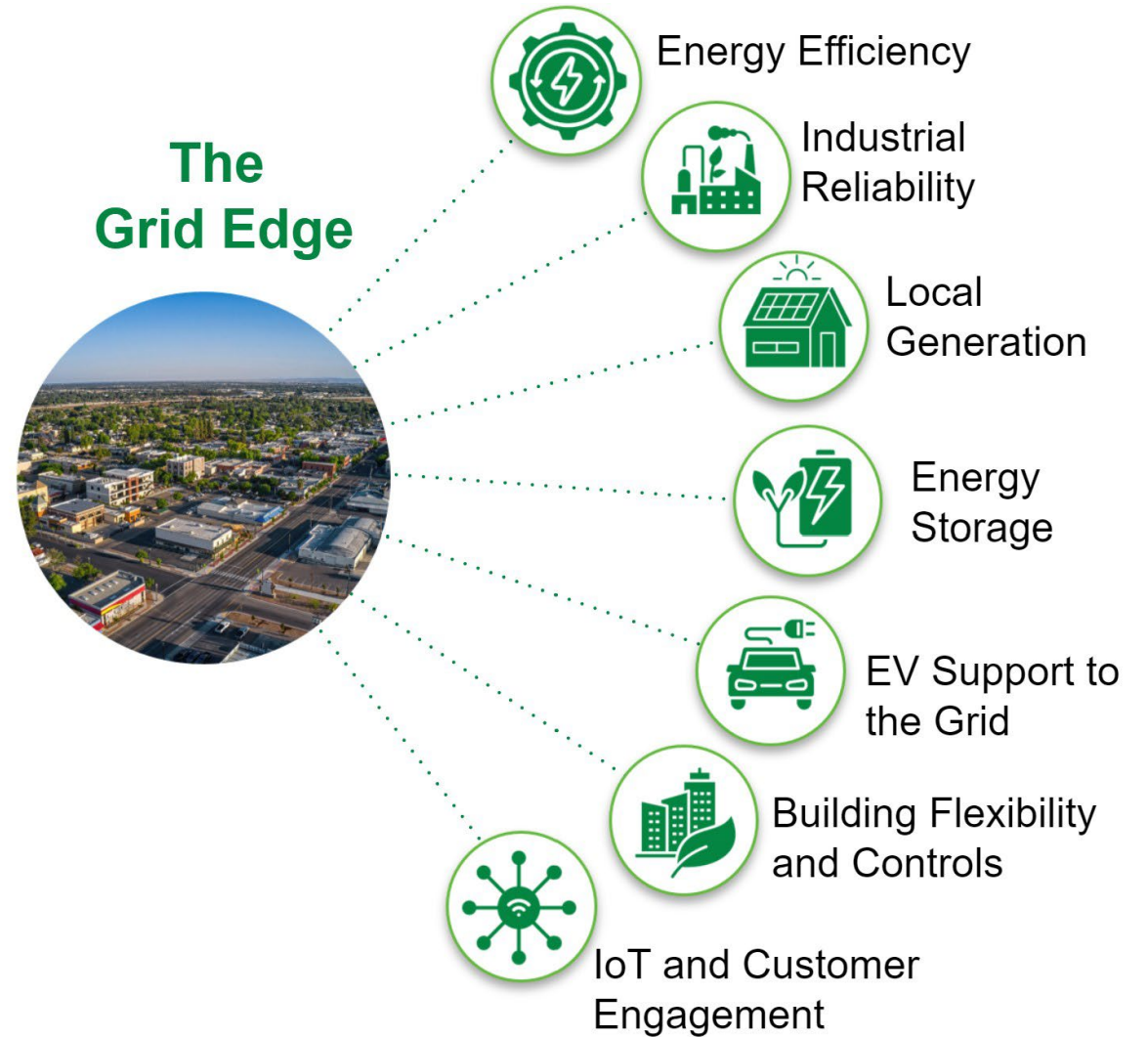
## Building Technologies Office

The Building Technologies Office (BTO) conducts research, development, and demonstration activities to accelerate the adoption of technologies and techniques that enable high-performing, affordable buildings that meet Americans' need for resiliency and health while also supporting a reliable energy system.



# Background

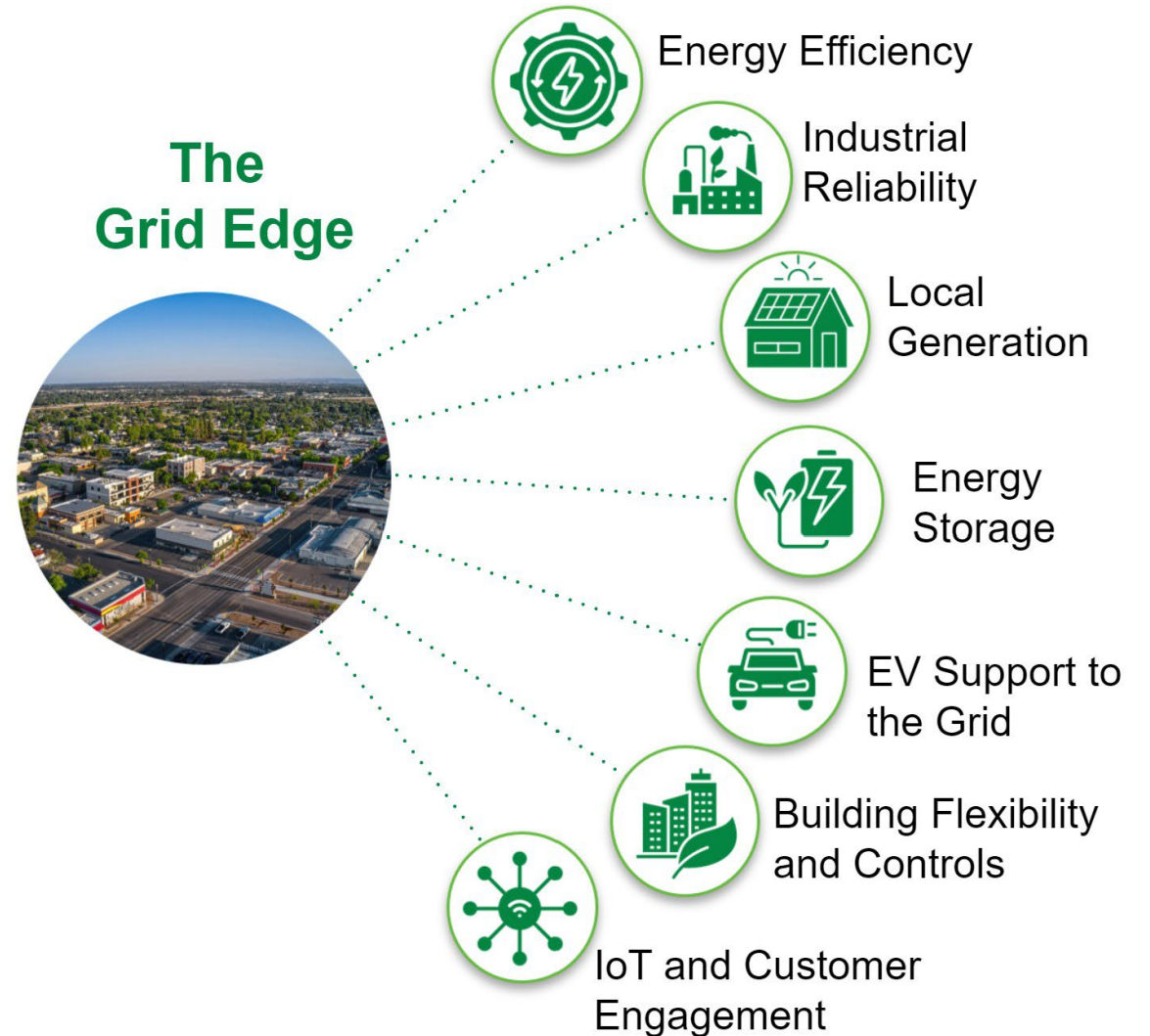
The grid edge is the segment of the electricity utility system between the distribution feeder line and appliance plugs. Grid edge technical measures include a wide range of technologies such as low power appliances, managed electric vehicle charging, demand-flexible building systems, thermal energy networks with energy storage, and other distributed energy resources such as batteries and rooftop solar. This is especially necessary for low-income communities that face limited distribution capacity, deficiencies in service reliability, and high energy bills.



# Background

The Connected Communities Data Opportunity is intended to help make the grid more efficient, flexible, and resilient by further validating the use of technical measures located at the grid-edge.

This opportunity will help increase the acceptance of grid-edge technical measures and innovative planning strategies by utilities, communities, and regulators as viable approaches towards efficient infrastructure investment for decarbonization.



# Overview

- **Purpose:** The Connected Communities Data Opportunity will support the collection and analysis of existing pilot program data focused on validating grid-edge technical measures and innovative planning strategies as viable strategies for efficient infrastructure investment.
- **Project Details:** Ideal candidates will have both proven capacity to deliver quality, insightful analysis and have existing access to data of interest. Selected awardees are anticipated to each receive around a \$1,000,000 award with no required cost share.

# Overview

- **Objective:** BTO is seeking applications from R&D organizations, universities, small and independent consulting firms, and community-based organizations for projects to aid in the analysis of data collected on the following topics, including but not limited to:
  - Assessment of readiness for new loads and demand flexibility for users within buildings and the distribution system.
  - Evaluation of grid edge technical measures that reduce the necessary level of future investment into distribution infrastructure and leverage existing distribution facilities.

# Overview

- **Objective (continued):**
  - Analysis on the increased customer and grid resilience using grid edge technical measures, both in front of and behind the meter.
  - Evaluation of the potential for distributed energy resources (solar, wind, hydro, batteries, other energy storage, EVs, etc.) to provide resilience and reliability to the expanding grid, especially smart charge management from electric vehicles.



# Overview

- **Objective (continued):**

Specifically, BTO is interested in analyses that:

- utilize data at the building, feeder and/or substation level
- represent diverse regions, geographies, and market regions, including but not limited to:
  - New York or from within NYISO; Texas or from within ERCOT; Midwest or from within MISO or SPP; Southeast; New England or from within ISO-NE; West; Northwest (with a particular emphasis on Puget Sound, Seattle City Light, Portland General Gas and Electric utilities)
- Note that applicant may also provide gas data in addition to electric data, but gas data without electric data is not of interest for this Opportunity.

# Potential Activities

- Applicant organizations must have identified existing pilot programs and/or field validation work already ongoing in the space and can demonstrate a prior or existing relationship with a utility (or utilities).
- This Opportunity is intended to further support and increase the scope of existing work, specifically to increase data collection, data analysis, and reporting.
- The data and analysis do not necessarily need to be new work but must be previously unpublished products equal in scope and of high quality.

# Potential Activities

## Proposed projects under this Opportunity cannot be used for the following:

- All information collected under this Opportunity must to the greatest extent possible exclude personally identifiable information (PII). “PII” refers to information that can be used to distinguish or trace an individual’s identity, such as their name, Social Security number, or biometric records, alone or combined with other personal or identifying information linked or linkable to a specific individual, such as date and place of birth or mother’s maiden name. Applicants must be able to obtain anonymized data from parties such as utilities. Applicants must also provide a data storage and transmission security plan to mitigate potential misuse.

# Potential Activities

**Proposed projects under this Opportunity cannot be used for the following:**  
(continued)

- Applicants may not, under any circumstances or conditions, control, or manage any element of the indoor environment in which people are present. This includes, but not limited to, actions like resetting thermostats or controlling lighting that affects indoor environments.

**Note that Collection of PII data and management of indoor environments can be handled by the utility in the project, if it is not a performer funded by DOE**

# Eligibility Criteria

To be eligible, applicants must:

- Have an existing or prior relationship with a utility from which data is collected, as demonstrated through a letter of recommendation or partnership from that utility
- Have a letter from legal counsel ensuring the ability to share data within the DOE ecosystem
- Qualify as a domestic entity[1]
- Applicants must certify it is not owned by, controlled, or subject to the jurisdiction or direction by the government of any Country of Risk[2]

*[See opportunity announcement page for footnotes]*

# Eligibility Criteria

Ineligible entities are:

- Individuals
- Foreign Entities
- Persons participating in a Foreign Government-Sponsored Talent Recruitment Program of a Foreign *Country of Risk* are prohibited from participating in projects selected for federal funding under this Opportunity. Should an award result from this Opportunity, the recipient must exercise ongoing due diligence to reasonably ensure that no individuals participating on the DOE-funded project are participating in a Foreign Government-Sponsored Talent Recruitment Program of a Foreign *Country of Risk*.

## Eligibility Criteria

(previous point continued):

- Consequences for violations of this prohibition will be determined according to applicable law, regulations, and policy. Further, the recipient must notify DOE within five (5) business days upon learning that an individual on the project team is or is believed to be participating in a foreign government talent recruitment program of a foreign country of risk. DOE may modify and add requirements related to this prohibition to the extent required by law.[3]

*[See opportunity announcement page for footnotes]*

# Eligibility Criteria

DOE retains the prerogative to require additional information from the applicants to verify the applicant meets the eligibility requirements. Further, DOE retains the prerogative to decide whether to fund the proposed project entirely, partially, or not at all.



# Review Criteria

Applications will be reviewed by the following criteria:

- Existing or prior relationship with utility from which data is collected, as demonstrated through a letter of recommendation or partnership from said utility.
- Ability to share data within the DOE ecosystem as documented in a letter from legal counsel as well as details about what level of data can be shared.

# Review Criteria

(continued):

- Degree to which the proposed analysis is applicable and demonstrates the inclusion of grid dynamics, specifically: new loads, resiliency measures, distributed system upgrades, planned infrastructure upgrades, DERs (solar, wind, hydropower, batteries, other storage systems and/or electric vehicles), as stated above.
- Focus on datasets of interest as stated above (from building, feeder and/or substation level and within preferred geographic areas).

# Review Criteria

(continued):

- Access to data that:
  - Comes from both the distribution and operation side of a utility and can bridge the communication gap between the two. Generation data is not required.
  - Is real (not modeled), joinable and is time stamped, geolocated over the distribution network typology, and temporal relationship.

# Review Criteria

(continued):

- Demonstrated prior experience executing work of similar scope and quality, such as:
  - Past projects using utility level data.
  - Past energy modeling products and projects
  - Published high quality data analytic products.
- Record of safe data management and robustness of the data management, storage, and/or transfer plan
- Ability of the team to execute the proposed work within the timeframe

# Timeline

<b>Applications open</b>	<b>December 9, 2024</b>
Office Hours Session #1	December 18, 2024 at 2 p.m. ET
Office Hours Session #2	January 7, 2025 at 2 p.m. ET
<b>Application Deadline</b>	<b>January 9, 2025 at 5 p.m. ET</b>
Review and Selection	By February 2025
Negotiations	~1 months after selections have been made
Selectees Announced	Anticipated April 2025
<b>Activities Begin</b>	<b>Anticipated April 2025</b>



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