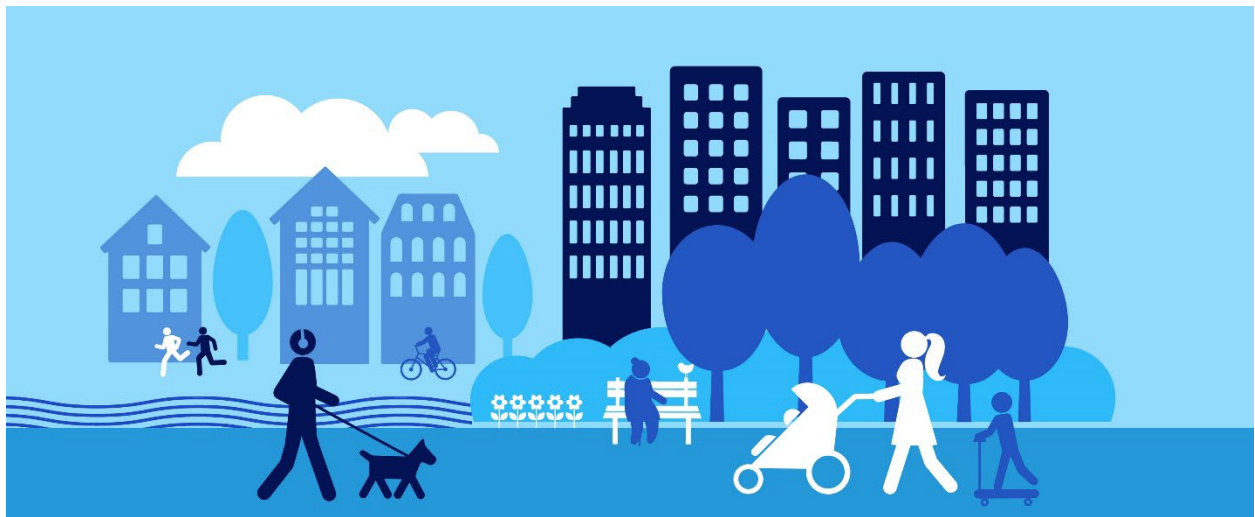


Buildings UP

The Buildings Upgrade Prize

An American-Made Challenges Prize Supported by the U.S. Department of Energy



Phase 1 OFFICIAL PRIZE RULES

Modification 4 - July 2023

Preface

The U.S. Department of Energy (DOE) Buildings Upgrade Prize (Buildings UP) will be governed by 15 U.S.C. §3719 and this Official Rules document. This is not a procurement under the Federal Acquisitions Regulations and will not result in a grant or cooperative agreement under 2 CFR 200. The Prize Administrator reserves the right to modify this Official Rules document if necessary and will publicly post any such notifications as well as notify registered prize participants.

Date	Modification
2/16/2023	<p>Page 9: Added clarification that Application Support Prize is intended for community-based organizations (CBOs) or other nonprofits that represent or serve areas with equity-eligible buildings (as defined in Section 3.5).</p> <p>Page 9: Added detail to Application Support Prize requirements emphasizing that a competitive Phase 1 submission must include the minimum technologies described in Section 2.5.</p> <p>Page 18: Added non-federally recognized tribal lands to Section 3.5 “Locally defined equity-eligible buildings”</p> <p>Page 20: Added clarification that Application Support Prize is intended for community-based organizations (CBOs) or other nonprofits that represent or serve areas with equity-eligible buildings (as defined in Section 3.5).</p>
3/24/2023	<p>Page 8: Clarified that in Phase 1, DOE is seeking strategies that focus on installation of efficient electric heating and cooling equipment and expanded the definition of efficient electric heating and cooling equipment to also include geothermal heat pumps.</p> <p>Page 8: Clarified that weatherization and envelope improvements (e.g., insulation, air sealing, window improvements are only required where needed to reduce energy costs.</p> <p>Page 13: Extended the final Application Support deadline from April 14 to April 26.</p> <p>Page 16: Added the Climate and Environmental Justice Screening Tool (CEJST) definition of Justice40 census tracts in addition to the existing DOE definition of disadvantaged communities.</p>
6/5/2023	<p>Page 9: Added Section 2.6 Applications Not of Interest program goal to emphasize that Concept Plans must include a building upgrade zone of more than 1 building for the full-scale initiative, include the minimum technology, and be relevant to the overall goals of the program.</p> <p>Page 25: Added two questions to the Team Information Questions to confirm the number of buildings and minimum technologies included in your pilot and full-scale building initiative.</p>

	<p>Page 27: Added clarifying text to indicate Teams should describe the building upgrade zones for the pilot and full-scale building upgrade initiatives.</p> <p>Page 34: Updated language in Appendix A.3 for Equity-Centered Innovation Pathway teams to have the ability to split prize awards between multiple entities.</p>
7/6/23	<p>Page 11: Clarified that for purposes of Phase 1, the FTE staff member available for the initiative does not need to solely reside within the lead organization but may be spread across different people/organizations.</p> <p>Page 21: Clarified that for purposes of Phase 1, that the FTE staff member may reside within either the lead organization or spread across different organizations within the team.</p>

Contents

Preface	2
1 Overview.....	5
2 Background.....	7
2.1 Role of Building Upgrades in Meeting National Greenhouse Gas Reduction Goals	7
2.2 Challenges to Building Upgrades.....	7
2.3 Potential Solutions for Scaling Building Upgrades	8
2.4 Prize Goals	8
2.5 Eligible Building Types and Upgrades.....	9
2.6 Applications Not of Interest	9
3 Prizes.....	10
3.1 Application Support Prize for New and Under-Resourced Teams.....	10
3.2 Phase 1: Concept.....	10
3.3 Key Dates	14
3.4 Eligibility and Teams	14
3.5 Equity-Eligible Buildings	16
4 Application Support Prize: Submission Requirements and Review Process.....	20
4.1 How to Enter.....	20
4.2 What to Submit and Scoring Criteria	20
4.3. How Narrative Will Be Scored	22
4.4. How Winners Are Determined	22
4.5 Additional Terms and Conditions	23
5 Phase 1 Concept Prize: Submission Requirements and Review Process.....	24
5.1 How to Enter.....	24
5.2 What to Submit and Scoring Criteria	24
5.3. How Narratives Will Be Scored	30
5.4. Additional Submission Materials	31
5.5. How Award Winners Are Determined.....	32
Appendix 1: Additional Terms and Conditions	33
A.1 Requirements	33
A.2 Verification for Payments.....	33
A.3 Teams and Awards	34
A.4 Submission Rights.....	34
A.5 Copyright	35
A.6 Contest Subject to Applicable Law	35
A.7 Resolution of Disputes	35
A.8 Publicity.....	35
A.9 Liability	36
A.10 Records Retention and Freedom of Information Act	36
A.11 Privacy.....	37
A.12 General Conditions	37
A.13 Program Policy Factors	37
A.14 National Environmental Policy Act Compliance	38
A.15 Return of Funds	38

1 Overview

The U.S. Department of Energy (DOE) Buildings Upgrade Prize (Buildings UP) is a capacity-building prize focused on reducing greenhouse gas emissions in existing buildings through energy efficiency and efficient electrification. In its first phase, Buildings UP will award over \$22 million in cash prizes and technical assistance to winning teams that develop innovative initiative models, leveraging billions in federal funding for energy efficiency and efficient electrification to accelerate building upgrades and achieve greenhouse gas reduction, equity, economic development, and health goals.

Buildings UP has four proposed phases, as shown in Figure 1, over approximately five years. This document addresses the rules for the Phase 1 and Application Support Prize only. *Subsequent phases are envisioned to offer similar prizes subject to the availability of funds.*

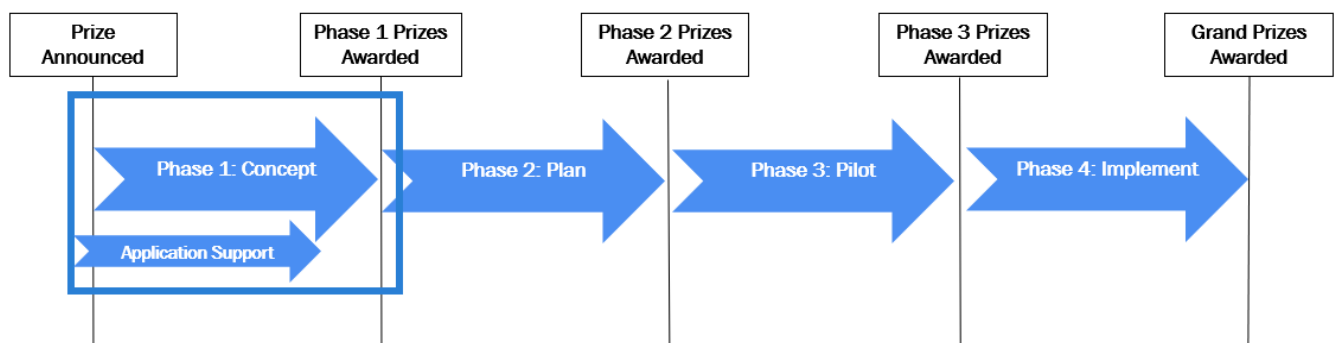


Figure 1. Proposed Buildings UP phases

Teams may apply to one of two pathways:

1. **Equity-Centered Innovation Pathway** – Teams propose a new initiative or innovation to an existing initiative for delivering scalable and replicable building upgrades to buildings in disadvantaged communities, low- and moderate-income (LMI) households, and underserved commercial, nonprofit, and public buildings, collectively referred to throughout this document as “equity-eligible” buildings. (See Section 3.5 for a detailed definition.)
2. **Open Innovation Pathway** – Teams propose a new initiative or innovation to an existing initiative that addresses a geographic area or building type and can achieve scalability and replicability of building upgrades.

Prizes will be awarded under Phase 1 to teams that present an actionable Concept Plan for an innovative energy efficiency and efficient electrification building upgrade initiative, including at a minimum electrifying heating and cooling, and that demonstrate a commitment to further develop and implement the initiative. Under Phase 1, winning teams in the Equity-Centered Innovation Pathway will be awarded \$400,000. Winning teams in the Open Innovation Pathway will be awarded \$200,000. Phase 1 winning teams will also have access to technical assistance to turn their concepts into actionable plans. Technical assistance may include but is not limited to direct one-on-one coaching, cohort webinars on best practices, connections with technology or other experts, building energy analysis, guidance on undertaking authentic community engagement, and advice on creative funding and financing strategies. Through this combination of cash prizes and tailored technical assistance, Buildings UP aims to empower teams to launch or improve building upgrade initiatives that, as a combined portfolio of solutions, will

deliver advances in energy efficiency, efficient electrification, comfort, indoor air quality, energy equity, housing affordability, and resilience.

Buildings UP is offering an application support prize during Phase 1 to encourage new and under-resourced applicants to participate. Up to 50 teams will each be awarded \$5,000 (\$250,000 total) and 10 hours of technical assistance (500 hours total) to support their Concept Plan submission development in Phase 1.

Additional information can be found in the [Buildings UP Frequently Asked Questions \(FAQ\)](#).

2 Background

2.1 Role of Building Upgrades in Meeting National Greenhouse Gas Reduction Goals

The U.S. building stock—consisting of more than 123 million homes and 5.9 million commercial buildings—consumes 75% of the nation’s electricity and 40% of the nation’s total energy, and accounts for 35% of the country’s carbon dioxide emissions. Within commercial and residential buildings, space heating, ventilating, and air conditioning (HVAC) and water heating account for over 60% of energy use. To meet the Biden administration’s ambitious [greenhouse gas reduction goals](#)¹ and [Justice40 commitments](#),² existing buildings across a wide variety of uses, sizes, vintages, and climates must be upgraded rapidly and equitably. Historically, most existing programs designed to deliver energy-efficient building upgrades have not scaled, and upgrades remain complicated, costly, disruptive, and undervalued.

To solve these challenges, DOE seeks to support and recognize energy efficiency and efficient electrification initiative innovations in areas such as project financing, project aggregation and customer acquisition, equipment ownership structures, soft cost reduction, workforce training, contractor development, alignment with affordable housing constraints, communications, community engagement, and project delivery.

2.2 Challenges to Building Upgrades

There are multiple persistent barriers to scaling energy efficiency and efficient electrification building upgrades, including:

- Lack of contractor familiarity with efficient electrification technologies (such as heat pumps and heat pump water heaters) and integrated building upgrades (such as a package of insulation, air sealing, and HVAC upgrades)
- High first costs for labor and equipment, compared to conventional equipment
- Lack of retrofit materials and components
- Limited short-term financial payback
- Insufficient numbers of skilled workers to design, finance, install, and maintain retrofits
- Lack of reach of funding and incentive programs to historically underserved households and building owners to provide energy efficiency and weatherization upgrades (for example, the Weatherization Assistance Program³ is only able to reach about 0.2% of eligible low-income households with weatherization upgrades annually⁴)
- Inconsistent quality of work and consumer mistrust.

¹ [FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies | The White House](#)

² [Justice40 Initiative | Environmental Justice | The White House](#)

³ [Weatherization Assistance Program | Department of Energy](#)

⁴ [Weatherization Cuts Bills and Creates Jobs but Serves Only a Tiny Share of Low-income Homes | ACEEE](#)

2.3 Potential Solutions for Scaling Building Upgrades

Through Buildings UP, teams can be rewarded for the development—and in later phases the implementation—of innovative approaches that address barriers to building upgrades, including but not limited to:

- **Innovative funding combinations and financing to reduce upfront costs** of equipment and installation, such as leveraging multiple sources of funding (e.g., combining federal rebates, state and local funding sources, and philanthropic funds to reduce the direct cost of upgrades to homeowners)
- **Scalable and replicable initiative models** that streamline the implementation of energy efficiency and efficient electrification upgrades (e.g., streamlined audits, permitting, contractor engagement, and installation)
- **Attractive business models** that incentivize manufacturers and contractors to produce and install heat pumps, insulation, and other products that enable energy efficiency and efficient electrification upgrades
- **Marketing and quantification of additional benefits for building owners and tenants**, such as from comfort and indoor air quality improvements, to incentivize greater uptake of retrofit measures
- **Promotion of energy efficiency and efficient electrification solutions among a broader range of stakeholders** through robust stakeholder engagement, communications campaigns, setting public goals, and promoting initiative successes
- **High-quality installations and upgrades** for optimal performance through streamlined quality assurance/quality control and workforce training support.

2.4 Prize Goals

Buildings UP aims to reward innovative initiatives that address persistent administrative, financial, social, and other barriers to improving building energy efficiency and reducing on-site emissions. While no single team is likely to address all barriers alone, the portfolio of solutions developed collectively by winning teams contributes to the achievement of prize goals.

Specifically, DOE seeks to support solutions that:

- **Accelerate building upgrades for efficiency and on-site emissions reductions.** Winning concepts will advance significant innovations for rapidly increasing retrofits beyond current best practices in the applicant's identified area of focus.
- **Demonstrate scalability and replicability.** Winning concepts will have applicability across building type(s) climate zone(s), and/or, community type(s).
- **Advance holistic and lasting energy efficiency and efficient electrification initiative development** (e.g., through supportive infrastructure, financing, and funding) with support from DOE's and the National Renewable Energy Laboratory's (NREL's) robust technical support network of American-Made Challenges "Power Connectors."
- **Benefit underserved communities.** The prize is structured to ensure that at least 40% of the initiative benefits accrue to equity-eligible buildings (see Section 3.5 for full definition), their occupants, and surrounding communities. Winning teams in the Equity-Centered Innovation Pathway will receive higher prize amounts, which can support deep and intentional engagement with communities being served.

2.5 Eligible Building Types and Upgrades

Buildings intended for upgrades may include one or multiple residential or commercial building types (e.g., single family; multifamily; manufactured housing; K–12 schools; higher education; commercial real estate; hospitality; health care; retail, food service, and grocery; local government buildings; state government buildings) and may be in a single community or include buildings across multiple geographic locations.

Minimum Technology Requirements

- Strategies that focus on installation of efficient electric heating and cooling equipment (i.e., heat pumps and/or heat pump water heaters, geothermal heat-pumps).
- Strategies that include Weatherization and envelope improvements (e.g., insulation, air sealing, window improvements) where needed to reduce energy costs.

Additional strategies and technologies teams may incorporate into their initiatives include:

- Efficient electric appliances
- Electric vehicle chargers
- On-site and community solar
- Electric panel upgrades
- Building controls
- Energy storage.

2.6 Applications Not of Interest

Applications that do not present strategies that address one or more of the goals specified in section 2.4, or that do not include the technologies as specified in section 2.5 are not of interest and will not be considered. Additionally, applications that define a building upgrade zone for the full-implementation initiative (see Criterion 1 in section 5.2.3.1) that is limited to a single building will not be considered.

3 Prizes

Application Support Prizes and Phase 1 Concept Prizes will be awarded to winning teams as described below.

3.1 Application Support Prize for New and Under-Resourced Teams

The Application Support Prize is meant to encourage applicants who might otherwise not have the staff capacity, time, or expertise to submit a full Phase 1 submission. The primary intended competitors for the Application Support Prize are first-time applicants for DOE Building Technologies Office funding, and community-based organizations (CBOs) or other organizations that represent or serve areas with equity-eligible buildings (as defined in Section 3.5).

Eligibility for the Application Support Prize is not limited to CBOs or nonprofits that already work on building upgrades. For example, a nonprofit organization that currently provides a food bank and counseling services to an area that contains equity-eligible buildings that also meets the other eligibility criteria in Sections 3.2.1 and 4.2 would be eligible to apply.

Up to 50 winning teams will be awarded \$5,000 and up to 10 hours of technical support (total prize pool of \$250,000 and 500 hours of technical support).

To be considered for the Application Support Prize, organizations involved in the team must:

1. Confirm they have NOT successfully secured funding from DOE's Building Technologies Office in the past 5 years.
2. Demonstrate that application support would allow them to develop a competitive Phase 1 submission, which must include the minimum technologies described in Section 2.5.
3. Confirm an intent to apply to Phase 1 of Buildings UP with a responsive submission that includes the minimum technologies described in Section 2.5 if the Application Support Prize is awarded.

Teams selected for the Application Support Prize can choose to use the cash awards to fund limited staff time or provide other programmatic support to complete the Phase 1 submission. Technical assistance will provide teams with additional expertise on submission structure and content. Technical assistance providers can advise teams but may not create content for Phase 1 submissions.

Application Support Prize submissions can be led by any organizational type. Interested teams can complete the [Application Support Prize HeroX submission form](#).

Table 1. Application Support Prize: Prizes to Win

Application Support Prize	Up to 50 awards of \$5,000 and 10 hours of technical assistance for new and under-resourced applicants
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3.2 Phase 1: Concept

A total of over \$22 million is available as awards to winning teams in Phase 1. Teams choose to compete in one of two prize pathways: the Equity-Centered Innovation Pathway or the Open Innovation Pathway. The two pathways are compared in Table 2.

Table 2. Prize Pathways

	Equity-Centered Innovation Pathway	Open Innovation Pathway
Equity Commitment	Team's building upgrade initiative demonstrates a focus on equity-eligible buildings (i.e., 80% of implementation would be equity-eligible). See definition in Section 3.5.	Team is encouraged to include equity-eligible buildings in initiatives, but not required.
Required Team Members	<ul style="list-style-type: none"> • Lead Organization (demonstrates at least 1 full-time equivalent [FTE] staff member available for the initiative, may be spread across different people/organizations) • Designated Prize Recipient (up to 2 per team) • Community Engagement expertise representing communities to be served (e.g., Community Based Organization). 	<ul style="list-style-type: none"> • Lead Organization (demonstrates at least 1 FTE available for the initiative, may be spread across different people/organizations) • Designated Prize Recipient (1 per team)
Encouraged Team Members	Expertise in accessing and/or combining multiple sources of funding to fully resource building upgrade initiatives.	Community engagement expertise. Expertise in accessing and/or combining multiple sources of funding to fully resource building upgrade initiatives.
Prize Funding	\$400,000	\$200,000

All teams must include:

1. **A Lead Organization** that commits at least one full-time equivalent (FTE) staff person for the duration of their involvement in Buildings UP. This FTE may be hired after Phase 1 awards are announced. **Additionally, the FTE may be spread across multiple organizations on the team or be one employee at one organization.**
2. **A Designated Prize Recipient** that is a legal entity and can receive prize funds. The Designated Prize Recipient can be a fiscal sponsor for a participating organization that is not a legal entity. The Lead Organization may also be the Designated Prize Recipient.

All teams are encouraged to include team members with expertise in accessing and combining multiple sources of funding (e.g., Inflation Reduction Act and Bipartisan Infrastructure Legislation funding, utility rebates, state and local government funds) to successfully resource the proposed building upgrades.

Teams competing in Phase 1 will provide team information and narratives through the HeroX online submission platform. The narratives will constitute the team's Buildings Upgrade Initiative Concept Plan.

During the Phase 1 submission period, limited general technical assistance will be available in the form of webinars open to all interested teams. DOE also plans to provide online venues through which entities interested in teaming can identify other possible team members.

DOE will select 20–60 Phase 1 winning teams between the Equity-Centered Innovation and Open Innovation Pathways. Teams selected to the Open Innovation Pathway will receive \$200,000 prize awards. Teams selected to the Equity-Centered Innovation Pathway will receive \$400,000 prize awards, recognizing that initiative development may be more challenging and require deeper community engagement.

Winning teams may use the award funds in any manner the teams determine appropriate. For instance, they may use the funds for initiative expenses such as salaries, community and stakeholder engagement, public outreach,⁵ and/or communications materials.

Phase 1 winning teams will also have access to the Team Collaboration Platform, technical assistance, and Regional Navigators, all detailed in Table 3. Winning teams may engage in activities including but not limited to participating in cohort trainings, conducting stakeholder engagement and partnership development, consulting with Prize technical assistance providers and Regional Navigators, creating a financing strategy, securing philanthropic and other gap funding for upgrades in equity-eligible buildings, and developing or refining workforce development structures to meet anticipated demand. These are examples of potential activities, and organizations are encouraged to think creatively about specific activities that play to their strengths and advance their goals.

Table 3. Phase 1 Prizes

Cash Prizes	20 to 60 cash prizes of \$400,000 each (Equity-Centered Innovation Pathway) OR \$200,000 each (Open Innovation Pathway). Maximum prize funding per team is \$400,000.
Regional Navigators	Access to Regional Navigators. Each winning team will be assigned a point of contact to provide support following the award announcement. This Regional Navigator will meet with each team regularly, advising on local and regional resources, and connect each winning team with appropriate Buildings UP technical assistance.
Technical Assistance	Access to technical assistance that can help winning teams identify resources in areas including but not limited to: <ul style="list-style-type: none"> • Staffing support for recruiting and hiring experienced staff to join the teams, especially for public sector entities and nonprofits that lack existing staff focused on equitable building upgrades. • Identifying funds from multiple sources that can be combined to help pay for building upgrades, such as new Inflation Reduction Act incentives, the Weatherization Assistance Program, utility programs, and other sources such as health and safety programs. • Financing and credit enhancement options, especially from organizations that can provide subsidized financing or can connect teams with supportive financial institutions.

⁵ Community engagement is designed to reach specified communities such as those that have been historically marginalized from decision-making or have experienced disproportionately high burdens and low benefits from previous policies and programs. Stakeholder engagement focuses on engaging with people or organizations that have historically been recognized as having a direct stake in an initiative and its effects. Public outreach is meant to primarily inform and broadly appeal to the public, typically without specifying populations.

	<ul style="list-style-type: none"> • Philanthropic support with community, regional, or national foundations. • Integrating health services and goals for health outcomes, including streamlining energy efficiency and healthy homes programs, incorporating requirements for healthy building materials, and plans to address health and safety issues prior to weatherization and electrification. • Supply chain support, especially for connecting major manufacturers and distributors of heat pumps and other building retrofit components, regional suppliers, and local contractors. • Facilitation support, especially to support team members that do not have a history of working together to connect, build trust, and collaborate effectively (support does not include mediation). • Building energy analysis to inform initiative design and prioritize retrofit solutions. • Support understanding of the constraints of specific building types, such as affordable housing or underserved commercial buildings, and the stakeholders involved. • Economic inclusion practices support, and inclusive local workforce and contractor development, including connecting with existing workforce programs and partners such as labor unions. • Addressing community priorities for racial and social equity in project plans, such as housing and energy affordability and preventing displacement of existing residents from neighborhoods. • Community engagement and outreach support, including for deep and equitable co-design of programs and accessible information. • Innovative agreement models, especially as they pertain to the equity aspects of Buildings UP, such as examples of Community Benefits Agreements, Principals of Partnership, Project Labor Agreements, and local affordable housing approaches that can provide enhanced economic benefits to the community (e.g., local workforce enhancement and improvements to low- and moderate-income housing). • Additional topics, as identified as critical needs from winning teams.
Training	<p>Access to trainings on energy efficiency and efficient electrification initiative development. These trainings may include topics such as developing partnerships, fostering authentic community engagement and leadership, assessing buildings, setting goals, creating workforce pipelines, addressing financial barriers, and creating a communications campaign or any of the technical assistance topics above.</p> <p>In addition, equity-focused trainings will be offered covering topics such as funding-braiding for low- and moderate-income household upgrades, leveraging philanthropic funding, and integrating health and safety upgrades into building upgrade initiatives. These trainings will be geared especially to teams in the Equity-Centered Innovation Pathway, but open to all teams.</p>

Team Collaboration Platform	Access to the Team Collaboration Platform with posted resources, inter-team networking, and opportunities to share lessons learned between teams.
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3.3 Key Dates

- Prize announcement and rules posted: January 18, 2023
- Application Support Prize submission opens: January 18, 2023
- Application Support Prize submission due dates: February 15, March 15, April 26, 2023
- Application Support Prize winners selected monthly: March–May 2023, until funds are expended
- Phase 1 Concept Prize submission opens: February 18, 2023
- Phase 1 Concept Prize submission closes: July 18, 2023
- Phase 1 winning teams announced, prizes awarded: September 2023
- Access to cohort trainings, technical assistance, and Regional Navigators begins for winning teams: October 2023

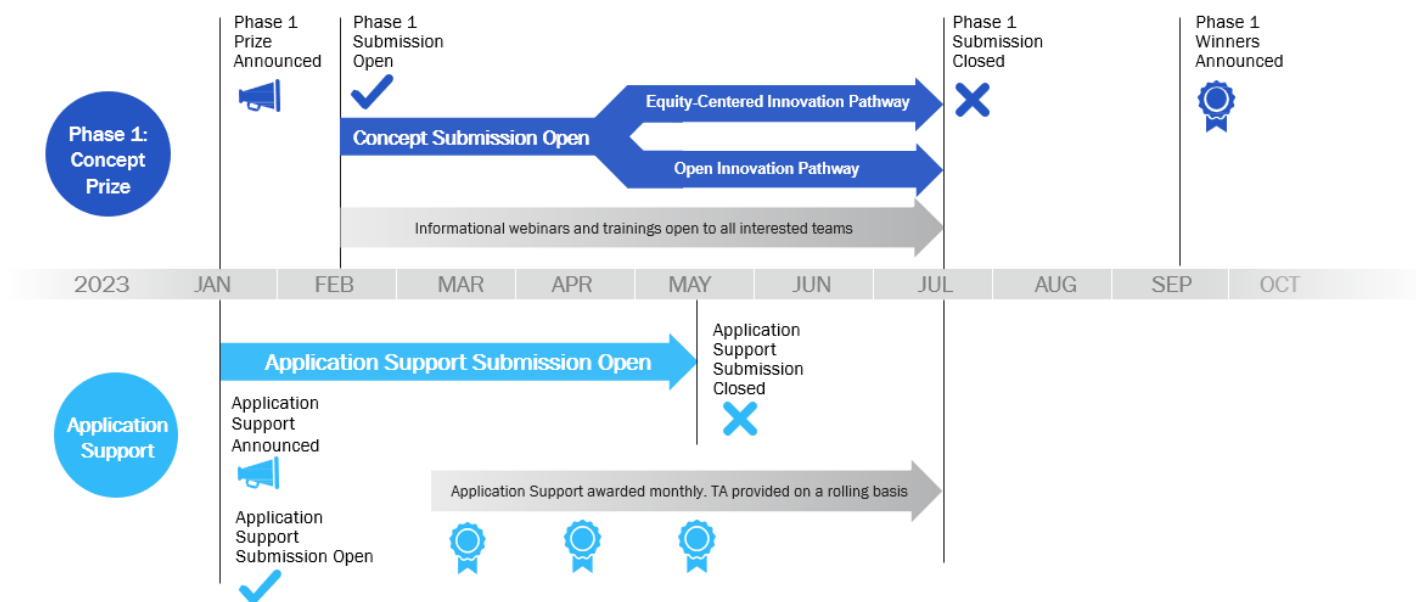


Figure 2. Phase 1 timeline
(TA = technical assistance)

3.4 Eligibility and Teams

Buildings UP is open to teams of organizations that may include:

- **Non-federal-government entities** such as municipalities, states, counties, tribal governments, territories, public housing authorities, and/or regional planning organizations.
- **Indian Tribes.** For the purposes of this prize, the term “Indian Tribe” includes both federally recognized and non-federally recognized (e.g., state-recognized) Indian tribes.
- **Community-based organizations (CBOs).** For this prize, DOE defines community-based organizations as “nonprofit organizations that are representative of a community or segments of

a community, defined by place or population, and provides financial, educational, cultural, and/or other resources aimed at enhancing health, wealth, and overall community well-being.” For-profit entities and large nonprofits with a particular area of focus beyond the local level are typically excluded from this definition. Ideally, CBOs are physically based in the communities they serve, though in some cases CBOs can be effective even without a physical presence. CBOs range from formal organizations with legal nonprofit status (501(c)(3), 501(c)(4), etc.) to informal, grassroots community groups that are mission-driven and headed by respected community leaders. **To be eligible for this Prize, a CBO must have its own nonprofit legal status OR utilize a fiscal sponsor with a nonprofit legal status.**

- ***Nonprofit or for-profit organizations*** such as portfolio building owners/operators, utilities, building upgrade service providers, unions, faith-based organizations, and other entities. Private entities must be incorporated in and maintain a primary place of business in the United States with majority domestic ownership and control.

Organizations participating on teams are subject to the following requirements:

- Private entities must be incorporated in and maintain a primary place of business in the United States with majority domestic ownership and control.
- Academic institutions must be based in the United States.
- An individual Prize competitor or group of competitors (Team) who are not competing as part of an incorporated private entity must all be United States citizens or legal permanent residents.
- Individuals competing as part of an incorporated private entity may participate if they are legally allowed to work in the United States.
- DOE employees, employees of sponsoring organizations, members of their immediate families (e.g., spouses, children, siblings, or parents), and persons living in the same household as such persons, whether or not related, are not eligible to participate in the Prize.
- Individuals who worked at DOE (federal employees or support service contractors) within six months prior to the submission deadline of any contest are not eligible to participate in any Prize phases in this program.
- Federal entities and federal employees are not eligible to compete in any portion of the Prize.
- DOE national laboratory employees cannot compete in the Prize.
- Entities and individuals publicly banned from doing with the U.S. government, such as entities and individuals debarred, suspended, or otherwise excluded from or ineligible for participating in federal programs are not eligible to compete.
- Entities and individuals identified as a restricted party on one or more screening lists of the Departments of Commerce, State, and the Treasury are not eligible to compete. See [Consolidated Screening List](#).
- This Prize competition is expected to positively impact U.S. economic competitiveness. Participation in a foreign government talent recruitment program⁶ could conflict with this

⁶ A foreign government talent recruitment program is defined as an effort directly or indirectly organized, managed, or funded by a foreign government to recruit science and technology professionals or students (regardless of citizenship or national origin, and whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the intended individual to physically relocate to the foreign state for the above purpose. Some programs allow for or

objective by resulting in unauthorized transfer of scientific and technical information to foreign government entities. Therefore, individuals participating in foreign government talent recruitment programs of foreign countries of risk⁷ are not eligible to compete. Further, teams that include individuals participating in foreign government talent recruitment programs of foreign countries of risk are not eligible to compete.

- As part of their submission to this Prize program, applicants will be required to sign the following statement:
 - *I am providing this submission package as part of my participation in this Prize. I understand that I am providing this submission to the Federal Government. I certify under penalty of perjury that the named competitor meets the eligibility requirements for this Prize competition and complies with all other rules contained in the Official Rules document. I further represent that the information contained in the submission is true and contains no misrepresentations. I understand false statements or misrepresentations to the Federal Government may result in civil and/or criminal penalties under 18 U.S.C. § 1001 and § 287.*

To compete in Buildings UP, a participating team must comply with the eligibility requirements above. By completing a submission, a team certifies that they follow these eligibility requirements. Eligibility is subject to verification before prizes are awarded. The registered competitor is the participant that registers in HeroX to compete.

Organizations meeting the above eligibility requirements may participate as Team Members or Team Leads, whether or not they are legally organized entities. However, prize funds can only be paid to legally organized entities. Winning teams should designate a legally organized entity to serve as the Designated Prize Recipient to receive prize funds.

Smaller organizations (e.g., small local governments or small utilities) may form consortia to participate as a team. Teams that support or administer existing building retrofit initiatives are eligible to apply, so long as their Concept Plan includes significantly expanding or improving upon an existing initiative or developing a new initiative.

3.5 Equity-Eligible Buildings

Buildings UP is committed to meeting the goals of the Justice40 Initiative,⁸ which directs 40% of the overall benefits of certain federal investments to flow to disadvantaged communities. The Office of Management and Budget's interim Justice40 implementation guidance⁹ defines a *community* as either:

1. A group of individuals living in geographic proximity (such as a census tract) or

encourage continued employment at U.S. research facilities or receipt of federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to U.S. entities. Compensation could take many forms, including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.

⁷ Currently, the list of countries of risk includes Russia, Iran, North Korea, and China.

⁸ See more information on the Justice40 Initiative at <https://www.whitehouse.gov/environmentaljustice/justice40/>.

⁹ The OMB interim Justice40 Initiative implementation guidance is available at <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>.

2. A geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions.

Buildings UP allows for teams to use both approaches in directing the benefits of building upgrades to disadvantaged communities, which can be defined by geography (such as buildings within a low-income neighborhood) or by characteristics of building occupants or users (such as low-income households or disadvantaged business enterprises).

For the purpose of this prize, the following building types are considered “equity-eligible” and will meet the requirements of the Equity-Centered Innovation Pathway:

1. **Buildings located within Climate and Environmental Justice Screening Tool (CEJST)-designated and/or DOE-designated Justice40 census tracts, federally recognized tribal lands, and U.S. territories.**¹⁰

Teams that use this approach to defining their equity-eligible buildings should reference the specific census tracts they plan to focus on for building upgrades as part of their participation in the prize. Teams should also explain which building types (low-income housing, underserved commercial, schools, etc.) they plan to upgrade within the specific DOE-designated Justice40 census tracts.

2. **Affordable housing and housing occupied by low-income residents.** Low-income households face a disproportionately higher energy burden, defined as the percentage of gross household income spent on energy costs.¹¹ According to DOE’s [Low-Income Energy Affordability Data \(LEAD\) Tool](#),¹² the national average energy burden for low-income households is 8.6%, nearly three times higher than for non-low-income households, which is estimated at 3%.

The following building types fit within this equity-eligible buildings category:

- a. **Subsidized affordable housing**, such as public housing, Project-Based Section 8 housing, housing subsidized by the Low-Income Housing Tax Credit, rural housing subsidized by U.S. Department of Agriculture programs, and affordable housing subsidized by other federal, state, or local funding.
- b. **Naturally occurring affordable rental housing**, or non-subsidized housing that provide affordable rents for households at the 80% level of area median income.¹³ Teams can consider any multifamily building located in a U.S. Department of Housing and Urban Development (HUD)-designated low-income housing tax credit “qualified census tract” as meeting these criteria.¹⁴
- c. **Homes occupied by low-income households**, or households whose total income falls below a certain threshold. These homes can include all housing types, including single

¹⁰ More information on the CEJST’s definition of disadvantaged communities can be found at <https://screeningtool.geoplatform.gov/en/about>.

¹¹ More information on DOE resources for low-income households is available at <https://www.energy.gov/eere/slsc/low-income-community-energy-solutions>.

¹² The LEAD Tool is available at <https://www.energy.gov/eere/slsc/maps/lead-tool>.

¹³ HUD defines affordable housing as “housing on which the occupant is paying no more than 30 percent of gross income for housing costs, including utilities.” See <https://archives.hud.gov/local/nv/goodstories/2006-04-06glos.cfm>.

¹⁴ HUD-designated qualified census tracts for the low-income housing tax credit must have 50 percent of households with incomes below 60 percent of the area median gross income or have a poverty rate of 25 percent or more. Data on qualified census tracts are available at <https://www.huduser.gov/portal/datasets/qct.html>.

family, multifamily, and manufactured housing. For this prize, teams may use the Weatherization Assistance Program eligibility definition of low income, which is 200% of the poverty level or 60% of state median income. Teams may also choose to use the definition of 80% of area median income, the income level that qualifies households for full low-income rebates through the Inflation Reduction Act Home Rebate program.

Teams that use this approach to defining their equity-eligible buildings should specify which of these affordable and low-income housing options they plan to upgrade and how they will identify the specific housing units for building upgrades during the later stages of the prize. For purposes of this prize, teams can consider an entire multifamily building as an equity-eligible building if greater than 50% of resident households are at 80% or less of area median income.

3. **Underserved commercial, nonprofit, and public buildings.** The underserved commercial and nonprofit sector includes many organizations and building types that provide vital services to communities and can experience high energy and building maintenance costs. These high costs can inhibit wealth-building and economic development on the commercial side and direct crucial resources away from services to the community on the nonprofit side. The following building types provide a framework for possible types of commercial buildings that could fit within this equity-eligible buildings category:
- a. **Buildings used by small disadvantaged businesses,**¹⁵ which include small businesses that are majority minority-owned, women-owned, or veteran-owned. These businesses can own or lease their operating space.
 - b. **Buildings used by businesses that serve disadvantaged communities,** especially businesses whose benefits or service offerings remain within the community.
 - c. **Title I schools,**¹⁶ or schools with high percentages of students qualifying for free and reduced-cost lunch, high percentages of students from low-income families, or located in rural or remote areas. Applicants can use this DOE mapping tool to identify Title I schools: <https://energyjustice-schools.egs.anl.gov/>.
 - d. **Buildings used by nonprofit organizations**¹⁷ that provide localized community services, such as emergency shelters, meal service centers, arts and culture organizations, and environmental, economic, and housing justice organizations. These nonprofits can own or lease their operating space.
 - e. **Buildings that provide critical community services,** such as public community centers, libraries, emergency service providers, and childcare centers.
 - f. **Buildings designated or planned to be designated for use as resilience hubs or disaster shelters.** These buildings are community-serving facilities augmented to support residents, coordinate communication, distribute resources, and provide temporary shelter during emergency and disaster relief situations. Resilient hubs aim to provide healthy buildings and energy security through efficient building design and operation, integration of renewables, and low-carbon backup power (such as batteries).

¹⁵ The federal definition of a “small disadvantaged business” is available here: <https://www.sba.gov/federal-contracting/contracting-assistance-programs/small-disadvantaged-business>.

¹⁶ Title I, Part A (Title I) of the Elementary and Secondary Education Act provides financial assistance to local educational agencies and schools with high numbers or high percentages of children from low-income families. More information on the program is available at <https://www2.ed.gov/programs/titleiparta/index.html>.

¹⁷ A building owned, operated, or leased by an organization that is described in section 501(c)(3) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of such Code.

- g. **Other commercial or nonprofit buildings defined as equity-eligible through community input.** See details below on how a team can make this determination.

Teams that use this approach to defining their equity-eligible buildings should specify which underserved commercial, nonprofit, and public building types they plan to focus on and how they will identify the specific buildings or units for building upgrades during later stages of the prize. Buildings UP recognizes that addressing underserved commercial, nonprofit, or public buildings is complex. Applicants should use their narratives to describe how upgrading these buildings would benefit the local community.

4. **Locally defined equity-eligible buildings** as defined or identified by the local community of the prize applicant team. DOE recognizes that community-based organizations, local governments, community leaders, and other local stakeholders have on-the-ground knowledge of underserved communities and disadvantaged areas not necessarily captured by national datasets or the categories above. The Office of Management and Budget Memo M-21-28: Interim Implementation Guidance for the Justice40 Initiative¹⁸ includes factors that can help a team to create its own local definition of equity-eligible buildings. The memo lists the following variables for consideration:

- Low income, high and/or persistent poverty
- High unemployment and underemployment
- Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
- Linguistic isolation
- High housing cost burden and substandard housing
- Distressed neighborhoods
- High transportation cost burden and/or low transportation access
- Disproportionate environmental stressor burden and high cumulative impacts
- Limited water and sanitation access and affordability
- Disproportionate impacts from climate change
- High energy cost burden and low energy access
- Jobs lost through the energy transition
- Access to healthcare

Although not included in the Memo, buildings on non-federally recognized tribal lands may also be eligible as locally defined equity-eligible buildings.

Teams that use this approach to defining their equity-eligible buildings should specify which criteria they are using to define their equity-eligible buildings, which can come from the categories listed above or from a team's local knowledge. Teams using this approach should also specify which neighborhoods and/or specific building types they will focus on and how they fit within the overall goals of the Justice40 Initiative. Finally, teams should share how they will approach upgrades for specific buildings during later stages of the prize.

Buildings UP understands that teams' plans for their Equity-Centered Innovation Pathway focus may change as they deepen community engagement and planning efforts. For Phase 1, teams should

¹⁸ This memo is available at <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>.

demonstrate a thoughtful initial definition for their equity-eligible buildings. In addition, teams should describe how they plan to reduce the risk of housing or leased space cost increases and/or displacement of current residents, businesses, and nonprofit organizations through the investments that will be made through their future building upgrades.

4 Application Support Prize: Submission Requirements and Review Process

4.1 How to Enter

The Application Support Prize is available for new and under-resourced teams that would like to apply for Buildings UP. Teams interested in competing for Application Support should go to [HeroX](#), the online application platform, and follow the instructions for registering and submitting all required materials before the specified deadline.

4.2 What to Submit and Scoring Criteria

Teams competing for the Application Support Prize must complete the Application Support Prize Submission Form on the HeroX platform (if you experience difficulties using the HeroX interface, contact BuildingsUP@nrel.gov). The form sections are described below. Organizations may be part of multiple submitting teams. Maximum support awarded to a single team is \$5,000 and 10 hours of technical assistance.

The following items are required for each submission:

Table 4. Required Submission Items for Application Support Prize

Item	Will Be Made Public	Scored Item
Eligibility Information	No	No
Team Information	Partial	No
Description of Need Narrative	No	Yes
Intent to Apply Narrative	No	Yes

4.2.1 Eligibility Information

Organizations applying for the Application Support Prize must meet eligibility requirements in Section 3.4 and confirm **both** of the following statements are true on the submission form:

- No organizations on the team have secured funding from the Building Technologies Office of the U.S. Department of Energy in the past 5 years.
- The Lead Organization is a community-based organization (CBO) or other organization representing or serving areas with equity-eligible buildings (as defined in Section 3.5)

NOTE: The Lead Organization for the Application Support Prize submission may be different from the Lead Organization for the Phase 1 Concept Prize submission.

4.2.2 Team Information

List basic information about your team. Responses to questions with an asterisk may be made public.

- Lead Organization name*
- Lead Organization type (CBO, local government, etc.)
- Equity-eligible buildings (indicate what factors from Section 3.5 make the buildings in the location equity-eligible; include short, required text description)
- Team name* (If applicable/known; teams will need to choose a name for the Phase 1 Concept Plan submission)
- Team project location(s)* (city and/or state where building upgrade initiative is anticipated to take place)
- Team Member Organizations* (as known at time of submission; team members may change during Phase 1)
- Designated Prize Recipient (legal entity that can receive prize funds; may be a fiscal sponsor).

4.2.3 Description of Need Narrative

Enter a narrative into the online HeroX narrative form describing your organization/team's existing capacity challenges to complete a Phase 1 Concept Plan submission. Responses should describe the team's resource challenges that constrain their ability to submit a competitive Phase 1 submission, and how a cash prize and technical assistance would support your team's ability to compete in Phase 1. Each narrative should be no longer than 500 words (maximum 5,000 characters).

4.2.3.1. Evaluation Criteria

There is one criterion that should be addressed in the Description of Need narrative:

Criterion 1: Demonstrated need for support to develop Phase 1 submission.

The following table describes the content that the team should provide in the narrative to successfully address the criterion. The left-hand column includes suggested content that addresses the criterion. The right-hand column contains the scored statements that reviewers will be using to score the criterion. Individual reviewers will assign a score between 1 and 6 for each scored statement after reviewing the project submission. The suggested content provided is not mandatory, and you will not be judged against it. Rather, these are examples of details to include to help guide your responses, and you are welcome to provide other information as you see fit.

Table 5. Application Support Prize Criterion

Criterion 1: Demonstrated Need for Support to Develop Phase 1 Submission	
Suggested Content Team Provides	Each Statement Scored on a 1–6 Scale
<ul style="list-style-type: none">• Describe current challenges your team is experiencing (e.g., lack of staff time, expertise) that make it difficult to complete a Phase 1 submission for Buildings UP.• Describe the full-time equivalent (FTE) staff your organization/team has available to complete a Phase 1 application.	<ul style="list-style-type: none">• The team has significant barriers to completing a Phase 1 submission.• DOE funding and technical assistance would significantly improve the likelihood that the team can complete a quality Phase 1 submission.•

<ul style="list-style-type: none"> Describe the annual budget of your organization. Describe the anticipated impact of a cash and technical assistance award to your team. How would Application Support impact your team's ability to complete a Phase 1 submission? 	
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4.3. How Narrative Will Be Scored

The Narrative Response will be scored from 1–6, as shown here, on how well they address the statements in each criterion.

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree

The following table explains the way the scores for each submission for Application Support will be calculated.

Table 6. Application Support Prize Score Calculation

Criteria	Number of Scored Statements	Percentage of Total Score	Total Possible Points
Criterion 1: Demonstrated need for support to develop Phase 1 submission	2	100%	12
TOTAL	2	100%	12

4.4. How Winners Are Determined

Thirty (30) days after the Application Support Prize submission period opens, the Prize Administrator screens all completed submissions and ensures that the teams are eligible. Reviewers evaluate and independently score the content of each eligible submission. Awardees will be determined as described below. *Eligible, meritorious teams will be awarded on a first come, first served basis. Application Support submissions will be reviewed and awarded monthly from February through May 2023, until funds are expended. Teams that are not selected for initial awards may resubmit for Application Support Prize until funds are expended.*

4.4.1 Reviewer Panel Scoring

The scoring of eligible submissions will proceed as follows:

- Reviewers review each submission (narrative responses) individually and assess the responses from the team to each statement in the criterion described in the table in Section 4.2.3.1.
- Reviewers score each statement 1–6, depending on the degree to which the reviewer agrees that the submission reflects the statement.
- Each statement score is added together to generate a total score for the submission, which can be up to 12 points as described in Table 6.
- The total scores from each reviewer are averaged to produce a final score for each competing team. This score will inform selection and prize awards.

- Reviewers can provide comments in addition to scores. Comments are provided to the teams; comments and scores are provided to the judge.

4.4.2 Interviews

DOE may decide to interview a subset of teams. The interviews would be held prior to the announcement of the winners and would serve to help clarify questions the reviewers may have. Participating in interviews is not required, and interviews are not an indication of a team's likelihood to win.

4.4.3 Final Determination

DOE will designate a federal employee to serve as the judge to make the final determination of the winners. Final determination by the judge will consider the reviewers' comments and scores, application of program policy factors (Appendix 1, Section A13), and the interview findings (if applicable).

4.4.4 Announcement

Approximately 15 days after the Application Support submission due date, the Prize Administrator will notify the winners and request the necessary information to distribute the prizes. The Prize Administrator may publicly announce the winners of the Application Support Prize.

4.5 Additional Terms and Conditions

See Appendix 1 for additional requirements. TEAMS THAT DO NOT COMPLY WITH THE ADDITIONAL REQUIREMENTS IN APPENDIX 1 WILL BE DISQUALIFIED.

5 Phase 1 Concept Prize: Submission Requirements and Review Process

5.1 How to Enter

Teams interested in competing in Buildings UP should go to [HeroX](#) and follow the instructions for registering and submitting all required materials before the specified deadline.

Teams are strongly encouraged to form multidisciplinary, cross-sector teams while developing their Concept Plans. The HeroX online prize platform provides a space where teams interested in collaboration can post information about themselves and learn about others who are also interested in competing in this Prize.

5.2 What to Submit and Scoring Criteria

Competitors applying for the Buildings UP Concept Prize should complete the Concept Prize submission form on the HeroX platform. The form sections are described below. Organizations may be a part of multiple submitting teams. Prize amounts for the Concept Prize will be in the amount of \$200,000 per team. An additional \$200,000 will be awarded to teams selected for the Equity-Centered Innovation Pathway.

The following items are required for each submission:

Table 7. Submission Items for Phase 1 Concept Prize

Item	Will Be Made Public ¹⁹	Scored Item
Eligibility Information	No	No
Team Information	Partial	No
Concept Plan Narratives	No	Yes
Summary Slide	Yes	No
Video Pitch (Optional)	Yes	No
Letters of Support	No	Yes

5.2.1. Eligibility Questions

Organizations applying for the Phase 1 Concept prize must meet requirements in Section 3.4.

¹⁹ Competitors who do not want the Concept Plan or other documents to be made public will need to mark them according to the instructions in Appendix 1 (Section A.10).

5.2.2 Team Information Questions

List basic information about your team. Responses to questions with an asterisk (*) may be made public.

- Team name*
- Team image (optional)*
- Team location(s)* (city and/or state where building upgrade initiative is anticipated to take place)
- Lead Organization name*
- Team Member Organizations* (as known at time of submission; team members may change during Phase 1): include organization name, website (optional), and POC name/email from each Team Member Organization
- Designated Prize Recipient(s) (legal entity that can receive prize funds; may be different from the Lead Organization and may be a fiscal sponsor): up to two Prize Recipients may be identified for Equity-Centered Innovation Pathway teams and one Prize Recipient may be specified for Open Innovation Pathway teams. More information on the distribution of prize funds can be found in Sections A2 and A3 of the Appendix.
- Prize Pathway* (Equity-Centered Innovation Pathway OR Open Innovation Pathway).
- Please indicate whether your pilot initiative includes heat pumps and heat pump water heaters (minimum technologies) Yes or No
- Please estimate how many buildings you plan to target for your full-scale building upgrade initiative in the next five years:
1) 1 building 2) 2-10 buildings 3) 10-100 buildings 4) 100-999 buildings 5) 1000+ buildings

5.2.3. Narratives

The required narratives constitute your team's building upgrade Concept Plan. There is one narrative for each criterion. Each narrative should be no longer than 500 words (maximum 5,000 characters). You may upload one page of supporting graphics, figures, or tables with each narrative if desired via the HeroX platform. Information contained in hyperlinks to external sources will not be reviewed or considered by the reviewers or the judge.

5.2.3.1. Narrative Criteria and Suggested Content

Below are the criteria that should be addressed in the narrative responses:

- **Criterion 1:** Assessing and Prioritizing Challenges
- **Criterion 2:** Addressing Challenges Through Innovation: Initiative Scope and Impacts
- **Criterion 3:** Scaling and Replicating Innovation Through Community Engagement
- **Criterion 4:** Demonstrating Capabilities and Team Characteristics Critical for Success
- **Criterion 5:** Achieving Equitable Building Upgrade Strategies (to be completed only by teams submitting to be selected for the Equity-Centered Innovation Pathway).

The narrative responses should collectively describe the program concept and address all applicable criteria. The following tables describe the content that the team should provide in the narrative responses to successfully address each criterion. The right-hand column contains the scored statements that the reviewers will be using for each of the criteria. Individual reviewers will assign a score between 1 and 6 for each scored statement after reviewing the project submission. The left-hand column includes

suggested content that addresses each criterion. These are examples of details to include to help guide your responses, and you are welcome to use other information as you see fit.

Table 8. Phase 1 Concept Prize Criteria

Criterion 1: Assessing and Prioritizing Challenges	
<p>Suggested content team provides:</p> <ul style="list-style-type: none"> Describe the building upgrade zone—the area identified for the pilot and the full-scale implementation of the building upgrade initiative. This may be an entire community, neighborhoods within a community, a utility service area, portfolio of geographically dispersed buildings, or another zone. Describe building type(s) to be addressed within the building upgrade zone and any key characteristics of these buildings. Describe your team’s understanding of the greatest challenges to building upgrades in your building upgrade zone (e.g., lack of contractor familiarity with decarbonization technologies and integrated building upgrades, high first costs for labor and equipment compared to conventional equipment, lack of retrofit materials/components, limited short-term financial payback, insufficient number of skilled workers to successfully implement retrofits, lack of reach of funding and incentive programs to historically underserved households). Explain how your team prioritized these challenges as critical to enabling widespread upgrades in your building upgrade zone. Describe initial stakeholder engagement your team has conducted, including engagement with historically marginalized communities, to identify and understand these challenges. 	<p>Each statement is scored on a 1–6 scale:</p> <ul style="list-style-type: none"> The team has a clearly defined building upgrade zone and articulates a vision for a full-scale building upgrade initiative beyond a pilot. The team demonstrates a comprehensive understanding of the challenges to energy and efficient electrification in the building upgrade zone. The team has articulated why addressing these challenges is critical to enabling widespread energy efficiency and efficient electrification upgrades. The team has sought out diverse stakeholder perspectives, including with historically marginalized communities, to assess and understand challenges to building upgrades.
Criterion 2: Addressing Challenges Through Innovation: Initiative Scope and Impacts	
<p>Suggested content team provides:</p> <ul style="list-style-type: none"> Describe the building upgrade initiative scope (i.e., starting a new building upgrade initiative or improving or expanding/improving an existing initiative, etc.). What innovative approach(es) does the building upgrade initiative introduce to address key challenges identified in Criterion 1 in a transformative way? 	<p>Each statement is scored on a 1–6 scale:</p> <ul style="list-style-type: none"> The building upgrade initiative addresses identified challenges with innovations that can deliver significant results, such as: <ul style="list-style-type: none"> Funding combinations and financing to reduce upfront costs Scalable and replicable models that streamline implementation of upgrades Attractive business models that incentivize manufacturers and contractors to enable upgrades

<ul style="list-style-type: none"> • Describe building upgrade strategies and technologies that may be utilized in the building upgrade initiative. (See Section 2.3 for a list of required and eligible technologies and strategies.) • Describe how the residents/building occupants, businesses, communities, and/or other populations of focus within the building upgrade zone may be positively or negatively impacted by the proposed upgrades (e.g., increased or decreased energy costs, displacement, improved indoor air quality, improved resilience, local workforce development). What is your plan to minimize negative impacts? Teams are encouraged to develop initiatives that offer multiple benefits. • How will local contractors and businesses participate in and benefit from this work (e.g., through inclusive procurement practices, local workforce development, local hiring)? 	<ul style="list-style-type: none"> ○ Quantification and marketing of additional co-benefits of upgrades for building owners and tenants ○ Promotion of energy efficiency and efficient electrification solutions among a broader range of stakeholders ○ Ensuring high quality installations and upgrades ○ Other. • The proposed portfolio of building upgrade technologies and strategies include at a minimum: (1) weatherization and envelope improvements and (2) efficient electric equipment installations (e.g., heat pumps, heat pump water heaters, and electric appliances), that are feasible for the climate zone(s) and building types identified in the building upgrade zone. • The proposed building upgrade strategies will deliver substantial benefits to residents/occupants. • The team has identified potential negative impacts to residents/occupants and described preliminary plans to minimize negative impacts.
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Criterion 3: Scaling and Replicating Innovation Through Community Engagement	
<p>Suggested content team provides:</p> <ul style="list-style-type: none"> • Describe how the innovation(s) addressing key challenge(s) outlined in Criterion 2 may be scaled to realize widespread adoption of building upgrades in the building upgrade zone. • How will your team work to center community members, especially historically marginalized community members, and/or other stakeholders in leadership and decision-making roles as you develop and scale your building upgrade initiative in your building upgrade zone? • Explain how the innovations addressing key challenge(s) described in Criterion 2 may be replicable (e.g., to other communities, building types) by your team or others. • Describe the stakeholders and who would be important to engage in order to replicate the innovative strategy (e.g., to other building types or locations). 	<p>Each statement is scored on a 1–6 scale:</p> <ul style="list-style-type: none"> • The team articulated a compelling vision for how the innovation(s) can be scaled in the building upgrade zone. • The team demonstrates a commitment to centering community leadership and meaningfully involving other stakeholders in the development and scaling of the building upgrade initiative. • The team has clearly explained how their innovation(s) can be replicated in other communities or building types. • The team has described the stakeholders that would be important to engage in order to replicate the innovation(s) elsewhere.

Criterion 4: Demonstrating Capabilities and Team Characteristics Critical for Success**Suggested content team provides:**

- What organizations/departments are on your team and what skills does each bring to the team?
- Describe the team's experience accessing and combining multiple sources of funding to fully resource initiatives or activities. (Note: letters of support from organizations that may provide funding to your building upgrade initiative are optional but encouraged.)
- What type(s) of support and technical assistance do you anticipate you will need to further develop and implement a building upgrade initiative?
- Describe your team's proposed budget for the next year if you win a prize award. How do you anticipate funding will be allocated between team members?

Each statement is scored on a 1–6 scale:

- The team includes members with the skills to develop and implement a building upgrade initiative, including members who can effectively lead community engagement efforts.
- The team includes expertise accessing and combining multiple sources of funding to resource initiatives or activities.
- The team demonstrates an understanding of the support and technical assistance they may need to address the identified key challenges.
- The proposed annual budget allocates funding among team members in a manner that will support success.

Criterion 5: Achieving Equitable Building Upgrade Strategies

(for teams submitting to be selected for the Equity-Centered Innovation Pathway only)

Suggested content team provides:

- How do the buildings your team proposes to address meet at least one criterion for equity-eligible buildings (see Section 3.5 for criteria)?
- What proportion of total building upgrades performed through your building upgrade initiative do you anticipate will take place in equity-eligible buildings? (Note: to be selected for the Equity-Centered Innovation Pathway, teams should commit to performing at least 80% of total upgrades in equity-eligible buildings.)
- Describe community-based organizations (CBOs) or other organizations on your team that represent and/or serve the occupants of the equity-eligible buildings to be addressed.
- Describe these organizations' history with the building occupants/residents and how they are well-positioned to provide valuable community perspectives to the team's planning and decision-making processes and/or contribute to initiative implementation. (Note: letters of support are

Each statement is scored on a 1–6 scale:

- The proposed buildings to be addressed by the initiative meet at least one criterion for equity-eligible buildings as defined in Section 3.5.
- The team intends to implement at least 80% of building upgrades in equity-eligible buildings.
- The team includes CBOs or other organizations that can represent the equity-eligible building residents/occupants in the building upgrade zone.
- The CBOs or other organizations are well-positioned to provide knowledge of community needs and to help shape overall the building upgrade initiative.

required if the team is not led by a CBO or Indian tribe.)	
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5.3. How Narratives Will Be Scored

The narrative response will be scored from 1 to 6, as shown here, on how well the team addresses the statements in each criterion.

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree

5.3.1. Open Innovation Pathway

The following table explains the way the scores for each submission will be calculated.

Table 9. Phase 1 Open Innovation Pathway Score Calculation

Criteria	Number of Scored Statements	Percentage of Total Score	Total Possible Points
Criterion 1: Assessing and Prioritizing Challenges	4	25%	24
Criterion 2: Addressing Challenges Through Innovation: Initiative Scope and Impacts	4	25%	24
Criterion 3: Scaling and Replicating Innovation Through Community Engagement	4	25%	24
Criterion 4: Demonstrating Capabilities and Team Characteristics Critical for Success	4	25%	24
TOTAL	16	100%	96

5.3.2. Equity-Centered Innovation Pathway

The following table explains the way the scores for teams submitting for the Equity-Centered Innovation Pathway will be calculated.

Table 10. Phase 1 Equity-Centered Innovation Pathway Score Calculation

Criteria	Number of Scored Statements	Percentage of Total Score	Total Possible Points
Criterion 1: Assessing and Prioritizing Challenges	4	20%	24
Criterion 2: Addressing Challenges Through Innovation: Initiative Scope and Impacts	4	20%	24
Criterion 3: Scaling and Replicating Innovation Through Community Engagement	4	20%	24
Criterion 4: Demonstrating Capabilities and Team Characteristics Critical for Success	4	20%	24
Criterion 5: Achieving Equitable Building Upgrade Strategies	4	20%	24
TOTAL	20	100%	120

5.4. Additional Submission Materials

5.4.1. Summary Slide (required)

Make a public-facing, one-slide submission summary that introduces your team and your building upgrade innovation concept. There is no template, so teams are free to present the information in any format. Any text must be readable in a standard printed page and a conference room projection and should be in at least 14-pt font. The summary slide may be made public.

5.4.2. Letters of Support (required for Equity-Centered Innovation Pathway if CBO or Indian tribe is not lead applicant)

Letters of support from team member organizations or other key partners and stakeholders involved in your initiative (e.g., community residents) may be uploaded in .pdf format. Teams applying for the Equity-Centered Innovation Pathway must include at least one letter of support from a relevant CBO or Indian tribe *if the CBO or Indian tribe is not the lead applicant*. Letters should detail any past work with the team and how the organization will be involved with or benefit from the proposed initiative.

5.4.3. Video Pitch (optional)

Upload a video up to three minutes in length that will familiarize reviewers and the public with your team and your concept. Suggested content for the video includes an introduction to your team, the building upgrade innovation concept, and the anticipated impact. Be creative and convey your information in a fun

and engaging way, but do not expend time on labor-intensive activities that only improve production quality (e.g., technical elements such as décor, lighting, and cinematic techniques). Reviewers will focus on the content, not the quality of the video production. Upload your video online to a publicly accessible platform (e.g., YouTube, Vimeo) and provide a link in the HeroX platform. The video pitch may be made public.

5.5. How Award Winners Are Determined

The Prize Administrator screens all completed submissions and ensures that the teams are eligible. Then the Prize Administrator, in consultation with DOE, assigns subject-matter-expert reviewers who independently score the content of each submission. The reviewers will be composed of federal and non-federal subject matter experts with expertise in areas relevant to the competition. They will review the team's Concept Plan (combined narratives) according to the evaluation criteria described in Section 5.2.

5.5.1. Reviewer Panel Scoring

The scoring of submissions will proceed as follows:

- Reviewers will review each submission (team information, narrative responses, summary slide, and letters of support and video pitch if provided) individually and assess the responses from the team to each statement in the criteria described in the tables in Section 5.2.
- Reviewers will score each statement 1–6, depending on the degree to which the reviewer agrees that the submission reflects the statement.
- Each statement score will be added together to generate a total score for the submission, which can be up to 96 points (or 120 points for teams submitting to be selected for the Equity-Centered Innovation Pathway) as described in the tables in Sections 5.3.1 and 5.3.2.
- The total scores from each reviewer will be averaged to produce a score for each competing team in each of the two pathways.

5.5.2. Interviews

DOE may decide to interview a subset of teams. The interviews would be held prior to the announcement of the winners and would serve to help clarify questions the reviewers may have. Participating in interviews is not required, and interviews are not an indication of a team's likelihood to win.

5.5.3. Final Determination

DOE will designate a federal employee to serve as the judge to make the final determination of the winners. Final determination of the winners by the judge will consider the reviewers' feedback and scores, application of program policy factors, and the interview findings (if applicable).

5.5.4. Announcement

Approximately 60 days after the contest closes, the Prize Administrator will notify the winners and request the necessary information to distribute the prizes. The Prize Administrator will then publicly announce the winners.

5.5.5. Additional Terms and Conditions

See Appendix 1 for additional requirements. TEAMS THAT DO NOT COMPLY WITH THE ADDITIONAL REQUIREMENTS IN APPENDIX 1 MAY BE DISQUALIFIED.

Appendix 1: Additional Terms and Conditions

A.1 Requirements

Your Buildings UP submission is subject to the following terms and conditions:

- You must post the final content of your Application Support Prize submission and upload the submission form online by 5 p.m. ET on February 15, 2023, before the prize's Application Support submission period closes. Additional Application Support Prize submissions will be considered on March 15, 2023, and April 15, 2023, if funds are available. Late submissions or any other form of submission may be considered subject to the availability of award funds.
- You must post the final content of your Phase 1 submission or upload the submission form online by 5 p.m. ET on July 18, 2023, before the prize's Phase 1 submission period closes. Late submissions or any other form of submission may be rejected.
- All submissions that you wish to protect from public disclosure must be marked according to the instructions in Section A10 of this Appendix. Unmarked or improperly marked submissions will be deemed to have been provided with unlimited rights and may be used in any manner and for any purpose whatsoever.
- You must include all the required elements in your submission. The Prize Administrator may disqualify your submission after an initial screening if you fail to provide all required submission elements. Teams may be given an opportunity to rectify submission errors due to technical challenges.
- Your submission must be in English and in a format readable by Microsoft Word or Adobe PDF. Scanned hand-written submissions will be disqualified.
- Submissions will be disqualified if they contain any matter that, in the sole discretion of the U.S. Department of Energy (DOE) or the National Renewable Energy Laboratory (NREL), is indecent, obscene, defamatory, libelous, and/or lacking in professionalism, or demonstrates a lack of respect for people or life on this planet.
- If you click "Accept" on the HeroX platform and proceed to register for any of the prizes described in this document, these rules will form a valid and binding agreement between you and DOE and are in addition to the existing HeroX Terms of Use for all purposes relating to these contests. You should print and keep a copy of these rules. These provisions only apply to the prize described here and no other prize on the HeroX platform or anywhere else.
- The Prize Administrator, when feasible, may give teams an opportunity to fix non-substantive mistakes or errors in their submission packages.
- As part of your submission to this prize, you will be required to sign the following statement:

I am providing this submission package as part of my participation in this prize. I understand that I am providing this submission to the Federal Government. I certify under penalty of perjury that the named team meets the eligibility requirements for this prize competition and complies with all other rules contained in the Official Rules document. I further represent that the information contained in the submission is true and contains no misrepresentations. I understand false statements or misrepresentations to the Federal Government may result in civil and/or criminal penalties under 18 U.S.C. § 1001.

A.2 Verification for Payments

The Prize Administrator will verify the identity and role of all teams before distributing any prizes. Receiving a prize payment is contingent upon fulfilling all requirements contained herein. The Prize

Administrator will notify winning teams using provided email contact information for the individual or entity that was responsible for the submission. Each team will be required to sign and return to the Prize Administrator, within 30 days of the date on the notice, a completed NREL Request for ACH Banking Information form and a completed W9 form (<https://www.irs.gov/pub/irs-pdf/fw9.pdf>). In the sole discretion of the Prize Administrator, a winning team will be disqualified from the competition and receive no prize funds if: (i) the person/entity does not respond to notifications; (ii) the person/entity fails to sign and return the required documentation within the required time period; (iii) the notification is returned as undeliverable; (iv) the submission or person/entity is disqualified for any other reason.

In the event of a dispute as to any registration, the authorized account holder of the email address used to register will be deemed to be the team. The “authorized account holder” is the natural person or legal entity assigned an email address by an Internet access provider, online service provider, or other organization responsible for assigning email addresses for the domain associated with the submitted address. All teams may be required to show proof of being the authorized account holder.

A.3 Teams and Awards

The Prize Administrator will award single dollar amounts to the designated prize recipient^(s) for each winning team in the Open Innovation Pathway, whether consisting of a single or multiple entities. It is the sole responsibility of the designated prize recipient or designated prize recipients to the extent authorized elsewhere in these rules, to allocate any prize funds among its member organizations or teammates as they deem appropriate. The Prize Administrator will not arbitrate, intervene, advise on, or resolve any matters or disputes between team members. Up to two Prize Recipients may be identified for Equity-Centered Innovation Pathway teams. The Prize Administrator will issue the dollar amounts indicated in the Pilot initiative budget to each of the identified Prize Recipients.

A.4 Submission Rights

By making a submission and consenting to the rules of the contest, a team is granting to DOE, the Prize Administrator, and any other third parties supporting DOE in the contest, an unlimited license to display publicly and to use any part(s) of the submission that are designated as “public” in the Official Rules for any government purpose. This license includes posting or linking to the public portions of the submission on the Prize Administrator or HeroX submissions, including the contest website, DOE websites, and partner websites, and the inclusion of the submission in any other media worldwide. The submission may be viewed by DOE, Prize Administrator, and judges and reviewers for purposes of the contests, including but not limited to screening and evaluation purposes. The Prize Administrator and any third parties acting on their behalf will also have the right to publicize teams’ names and, as applicable, the names of team member organizations, which participated in the submission on the contest website indefinitely.

By entering, the team represents and warrants that:

1. The team’s entire submission is an original work by the team and the team has not included third-party content (such as writing, text, graphics, artwork, logos, photographs, likeness of any third party, musical recordings, clips of videos, television programs or motion pictures) in or in connection with the submission, unless (i) otherwise requested by the Prize Administrator and/or disclosed by the team in the submission, and (ii) team has either obtained the rights to use such third-party content or the content of the submission is considered in the public domain without any limitations on use.

2. Unless otherwise disclosed in the submission, the use thereof by Prize Administrator, or the exercise by Prize Administrator of any of the rights granted by team under these rules, does not and will not infringe or violate any rights of any third party or entity, including, without limitation, patent, copyright, trademark, trade secret, defamation, privacy, publicity, false light, misappropriation, intentional or negligent infliction of emotional distress, confidentiality, or any contractual or other rights.
3. All persons who were engaged by the team to work on the submission or who appear in the submission in any manner have:
 - a. Given the team their express written consent to submit the submission for exhibition and other exploitation in any manner and in any and all media, whether now existing or hereafter discovered, throughout the world;
 - b. Provided written permission to include their name, image, or pictures in or with the submission (or, if a minor who is not team's child, team must have the permission of the minor's parent or legal guardian) and the team may be asked by the prize administrator to provide permission in writing; and
 - c. Not been and are not currently under any union or guild agreement that results in any ongoing obligations resulting from the use, exhibition, or other exploitation of the submission.

A.5 Copyright

Each team represents and warrants that the team is the sole author and copyright owner of the submission; that the submission is an original work of the team or that the team has acquired sufficient rights to use and to authorize others, including DOE, to use the submission, as specified throughout the rules; that the submission does not infringe upon any copyright or any other third-party rights of which the team is aware; and that the submission is free of malware.

A.6 Contest Subject to Applicable Law

All contests are subject to all applicable federal laws and regulations. Participation constitutes each participant's full and unconditional agreement to these Official Rules and administrative decisions, which are final and binding in all matters related to the contest. This notice is not an obligation of funds; the final award is contingent upon the availability of appropriations.

A.7 Resolution of Disputes

DOE is solely responsible for administrative decisions, which are final and binding in all matters related to the contest.

Neither DOE nor the Prize Administrator will arbitrate, intervene, advise on, or resolve any matters between team members or among teams.

A.8 Publicity

The winners of these prizes (collectively, "winners") will be featured on DOE and NREL websites.

Except where prohibited, participation in the contest constitutes each winner's consent to DOE's and its agents' use of each winner's name, likeness, photograph, voice, opinions, and/or hometown and state information for promotional purposes through any form of media worldwide, without further permission, payment, or consideration.

A.9 Liability

Upon registration, all participants agree to assume any and all risks of injury or loss in connection with or in any way arising from participation in this contest. Upon registration, except in the case of willful misconduct, all participants agree to and, thereby, do waive and release any and all claims or causes of action against the federal government and its officers, employees, and agents for any and all injury and damage of any nature whatsoever (whether existing or thereafter arising, whether direct, indirect, or consequential, and whether foreseeable or not), arising from their participation in the contest, whether the claim or cause of action arises under contract or tort.

DOE has determined that no liability insurance naming DOE as an insured will be required of teams to compete in this competition per 15 U.S.C. § 3719(i)(2). Teams should assess the risks associated with their proposed activities and adequately insure themselves against possible losses.

A.10 Records Retention and Freedom of Information Act

All materials submitted to DOE as part of a submission become DOE records and are subject to the Freedom of Information Act. The following applies only to portions of the submission not designated as public information in the instructions for submission. If a submission includes trade secrets or information that is commercial or financial, or information that is confidential or privileged, it is furnished to the Government in confidence with the understanding that the information shall be used or disclosed only for evaluation of the submission. Such information will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act. Without assuming any liability for inadvertent disclosure, DOE will seek to limit disclosure of such information to its employees and to outside reviewers when necessary for review of the submission or as otherwise authorized by law. This restriction does not limit the Government's right to use the information if it is obtained from another source.

Submissions containing confidential, proprietary, or privileged information must be marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The U.S. Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose.

The submission must be marked as follows and identify the specific pages containing trade secrets, confidential, proprietary, or privileged information: "Notice of Restriction on Disclosure and Use of Data: Pages [list applicable pages] of this document may contain trade secrets, confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes. [End of Notice]"

The header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: "Contains Trade Secrets, Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure." In addition, each line or paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets.

Teams will be notified of any Freedom of Information Act requests for their submissions in accordance with 1010 CFR part 1004. Teams may then have the opportunity to review materials and work with a Freedom of Information Act representative prior to the release of materials. DOE does intend to keep all submission materials private except for those materials designated as "will be made public." DOE will

make its own determination about the status of the information and treat it according to its determination. DOE makes the final determination.

A.11 Privacy

If you choose to provide HeroX with personal information by registering or completing the submission package through the contest website, you understand that such information will be transmitted to DOE and may be kept in a system of records. Such information will be used only to respond to you in matters regarding your submission and/or the contest unless you choose to receive updates or notifications about other contests or programs from DOE on an opt-in basis. DOE and NREL are not collecting any information for commercial marketing.

A.12 General Conditions

DOE reserves the right to cancel, suspend, and/or modify the prize, or any part of it, at any time. If any fraud, technical failures, or any other factor beyond DOE's reasonable control impairs the integrity or proper functioning of the prize, as determined by DOE in its sole discretion, DOE may cancel the prize. Any performance toward prize goals is conducted entirely at the risk of the team and DOE shall not compensate any teams for any activities performed in furtherance of this prize.

Although DOE may indicate that it will select up to several winners for each prize, DOE reserves the right to only select teams that achieve the goals of the program. If, in DOE's determination, no teams achieve the goals of the program, DOE will select no teams to be winners and will award no prize money.

A.13 Program Policy Factors

While the scores of the expert reviewers will be carefully considered, it is the role of the prize judge to maximize the impact of prize funds. Some factors outside the control of teams and beyond the independent expert reviewer scope of review may need to be considered to accomplish this goal. The following is a list of such factors. In addition to the reviewers' scores, the below program policy factors may be considered in determining winners:

- Geographic diversity, urbanization diversity (i.e., cities, suburbs, towns, villages), and potential economic impact of projects.
- Whether the use of additional DOE funds and provided resources are non-duplicative and compatible with the stated goals of this program and the DOE mission generally.
- The degree to which the submission exhibits programmatic or technological diversity, including diversity in types of buildings served, when compared to the existing DOE project portfolio and other teams.
- The degree to which the submission is likely to lead to increased employment and manufacturing in the United States, enhance economic inclusion or provide other economic benefits to U.S. taxpayers.
- The degree to which the submission will accelerate transformational technological, financial, or workforce advances in areas that industry by itself is not likely to undertake because of technical or financial uncertainty.
- The degree to which the submission supports complementary DOE-funded efforts or projects, which, when taken together, will best achieve the goals and objectives of DOE.
- The degree to which the submission expands DOE's funding to new teams and recipients who have not been supported by DOE in the past.
- The degree to which the submission enables new and expanding market segments.

- Whether the project promotes increased coordination with nongovernmental entities and increased coordination among governmental entities (e.g., between a local and state government or between housing and energy agencies within local or state government) toward enabling a just and equitable clean energy economy in their region and/or community.
- The degree to which the submission demonstrates a best practice approach to delivering multiple benefits to the community (e.g., emissions reductions, health benefits, local workforce and contractor development, inclusive procurement practices, energy and housing affordability, preventing displacement).
- The degree to which the submission acknowledges and seeks to mitigate racial inequities caused by past and current policies.

A.14 National Environmental Policy Act Compliance

This prize is subject to the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321, et seq.). NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website at <http://nepa.energy.gov/>.

While NEPA compliance is a federal agency responsibility and the ultimate decisions remain with the federal agency, all participants in the Buildings UP Prize will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their participation in the prize competition. Participants may be asked to provide DOE with information such that DOE can conduct a meaningful evaluation of the potential environmental impacts.

A.15 Return of Funds

As a condition of receiving a prize, teams agree that if the prize was made based on fraudulent or inaccurate information provided by the team to DOE, DOE has the right to demand that any prize funds or the value of other non-cash prizes be returned to the government.

ALL DECISIONS BY DOE ARE FINAL AND BINDING IN ALL MATTERS RELATED TO THE PRIZE.