GUIDE-H2

(Guiding Universal Indicators in Developing Ecosystems for Hydrogen)

OFFICIAL APPLICATION GUIDELINES

JANUARY 2025

Preface

The U.S. Department of Energy's Guiding Universal Indicators in Developing Ecosystems for Hydrogen (GUIDE-H2) Competition will be governed by 15 U.S.C. §3719 and this Official Rules document. This is not an acquisition under the Federal Acquisition Regulations (FAR) 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.

MODIFICATIONS SUMMARY

Date	Modification

Contents

1 Executive Summary

The U.S. Department of Energy's (DOE's) Hydrogen and Fuel Cell Technologies Office (HFTO) within the Office of Energy Efficiency and Renewable Energy (EERE) is launching the "Guiding Universal Indicators in Developing Ecosystems for Hydrogen" (**GUIDE-H2**) Competition with $200,000 in award funds to increase practitioner experience applying analytic methods and developing guidelines, consistent frameworks, and best practices to assess real-world, clean hydrogen energy projects.

Hydrogen is one part of a comprehensive portfolio of energy solutions to enable a strong, sustainable economy and a secure, resilient, affordable, and equitable clean energy future. As a versatile energy carrier, hydrogen can be used to power key economic engines that are essential to both the domestic and global economy and quality of life, such as heavy-duty transportation and industrial and chemical processes like steelmaking and fertilizer production. It can also offer low-cost options for long duration energy storage and dispatchable, efficient power generation for critical loads such as data centers – which are increasing global energy demands. In addition, when used in a fuel cell, hydrogen produces both zero air pollution and zero carbon emissions, providing a unique option that can improve air quality and help address human health issues. Cutting emissions will be beneficial for communities that have suffered disproportionately in the past and can help create jobs in industries across the value chain from hydrogen production to end use. Although hydrogen technologies have come a long way over the last several years, costs and other challenges to at-scale adoption need to be addressed for clean hydrogen to realize its full potential.

GUIDE-H2 aims to **address a key challenge** with recent hydrogen projects which can be delayed or cancelled often due to the lack of tools, training, and local support to assess and optimize deployments for maximum positive impact. Deployments often do not systematically consider issues such as local water use, infrastructure impacts, jobs, the entire ecosystem from production through end use, or other factors that can result in project delays or stoppage. Consistent, universally understandable indicators that can help guide deployments and accelerate progress while enabling long-term sustainability would be of significant value.

GUIDE-H2 would increase practitioner experience developing and applying robust analytic methods to systematically assess the benefits and impacts of hydrogen deployment projects. As a result, the competition would incentivize the sharing of best practices, enable transparency and optimization, and enhance the economic, social, and environmental benefits of hydrogen deployments – contributing to increased likelihood of project success. Outcomes can be used in hydrogen workforce development efforts, particularly based on experiential technical training and education.

Applicants will develop and/or utilize innovative frameworks for methodical sustainability assessments and evaluate real-world, planned, or conceptual hydrogen projects based on their economic, social, and environmental impacts for hydrogen production, distribution, and end use, aiming to ensure both near-term project viability and long-term sustainability. These case studies will be used to develop guidelines and best practices to inform and improve future real-world projects to realize optimal success across economic, societal, environmental, and other relevant factors.

GUIDE-H2 is aligned with the Hydrogen Interagency Task Force (HIT) activities and will be coordinated across relevant agencies in support of the *U.S. National Clean Hydrogen Strategy and Roadmap* and congressional direction. This effort will also be coordinated with the H2 Twin Cities workstream under the Clean Energy Ministerial's (CEM) Hydrogen Initiative (H2I), which links communities across the world to share best practices and accelerate successful hydrogen deployments. International collaboration is encouraged but international competitors on the team are not eligible to receive any DOE funds, the prime applicant must be a U.S. entity (see Eligibility and Competitors section) to receive DOE funds. HFTO

also aims to disseminate information across other global, national, state, and local partnerships which will support training for workforce development incorporating examples of how to optimize real-world projects for maximum benefits.

1.1 Competition Phases

The GUIDE-H2 Competition offers a total award pool of $200,000 in cash awards plus additional rewards and recognition across two phases.

In Phase I, competitors will propose an innovative, comprehensive approach for assessing a real, planned or theoretical commercial hydrogen deployment project as a case study. Factors for sustainability,with various indicators for societal, economic, and environmental impact, must be included in the proposed assessment. Up to six Phase I winning teams will receive $10,000 each in cash and will be eligible to compete in Phase II.

In Phase II, winning teams will conduct the proposed project assessment and craft a case study that details their innovative approach and results, including a summary of best practices that could be emulated in real-world deployments. At the end of Phase II, up to three winning teams will receive $20,000 (for third place), $40,000 (for second place), and $80,000 (for first place) in cash and be invited to attend and present at high-profile venues such as CEM roundtables, webinars, and the DOE Hydrogen Program Annual Merit Review in Washington, D.C.

Contest	Winners	Competitions
Phase I	6 winners	$10,000 cash award
Phase II	3 winners	$20,000, $40,000, and $80,000 cash awards for 3rd, 2nd, and 1st place, respectively. External recognition would involve invitations to present at venues such as CEM round-tables, webinars, and the DOE Hydrogen Program Annual Merit Review in Washington DC.

1.2 Key Dates

- Phase I - Submission Opens: January 10, 2025
- Phase I - Submission Closes: June 30, 2025, 5 p.m. ET
- Phase I –Winner Announcement: July 31, 2025 (anticipated).
- Phase II - Opens: August 1, 2025 (anticipated).
- Phase II –Submission Closes: April 22, 2026 (Earth Day), 5 p.m. ET (anticipated).
- Phase II –Winner Announcement: May 29, 2026 (anticipated).

1.3 Eligibility and Competitors

The competition is open only to individuals; private entities (for-profits and nonprofits); non-federal government entities such as states, counties, tribes, and municipalities; and academic institutions;

subject to the following requirements[1]. While international collaboration is encouraged, the lead applicant must be a U.S. entity to receive DOE funds.

- An individual prize competitor (who is not competing as a member of a group) must be a U.S. citizen or permanent resident.
- A group of individuals competing as one team may win, provided that the online account holder of the submission is a U.S. citizen or permanent resident.
- If the lead applicant is a private entity, it must be incorporated in and maintain a primary place of business in the United States.
- If the lead applicant is an academic institution, it must be based in the United States.
- Federal 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 a U.S. federal agency (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 contests in this program.
- Federal entities are not eligible to participate in any portion of the prize.
- Federal national laboratory employees cannot compete in the prize.
- Entities and individuals publicly banned from doing business 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.
- Individuals participating in a foreign government talent recruitment program[2] sponsored by a country of risk[3] and teams that include such individuals are not eligible to compete.
- Entities owned by, controlled by, or subject to the jurisdiction or direction of a government of a country of risk are not eligible to compete.
- To be eligible, an individual authorized to represent the competitor must agree to and sign the following statement upon registration with HeroX:

  > I am providing this submission package as part of my participation in this prize. I understand that the information contained in this submission will be relied on by the federal government to determine whether to issue a prize to the named competitor. I certify under penalty of perjury that the named competitor meets the eligibility requirements for this prize

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[1] These eligibility criteria apply for the current round issued by HFTO per U.S. federal prize requirements. As a pilot initiative supporting the CEM H2 Twin Cities program, similar criteria may be relied upon for awards supported by co-funding from partners in potential future rounds of the competition.

[2] Foreign Government-Sponsored Talent Recruitment Program is defined as an effort directly or indirectly organized, managed, or funded by a foreign government, or a foreign government instrumentality or entity, to recruit science and technology professionals or students (regardless of citizenship or national origin, or 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 targeted individual to relocate physically to the foreign state for the above purpose. Some programs allow for or encourage continued employment at United States 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.

[3] DOE has designated the following countries as foreign countries of risk: Iran, North Korea, Russia, and China. This list is subject to change.

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, and 31 U.S.C. §§ 3729-3733 and 3801-3812.

In keeping with the goal of growing a community of innovators, competitors are encouraged to form multidisciplinary teams while developing their concept. The HeroX platform provides a space where parties interested in collaboration can post information about themselves and learn about others who are also interested in competing in this contest.

Phase 1 Eligibility

- A single competitor or team may submit a maximum of three submissions. If more than three submissions are received from a single competitor or team, the three most recently submitted submissions will be considered.

Phase 2 Eligibility

- Only winners of Phase 1 are eligible to compete in Phase 2.

2 Background

2.1 Competition Background

The importance of project-level sustainability assessments has grown significantly over the past decade, reflecting broader stakeholder commitments to multiple facets for success-including economic, social and environmental benefits-and to the recognition that deployments may be delayed or stalled without community engagement and buy-in. As the number of clean hydrogen projects grows both domestically and internationally, the need for a rigorous and consistent framework to assess and optimize projects, including overall sustainability, becomes more critical to project success and as a means of demonstrating stakeholder social license to operate.

While there are diverse definitions and uses of the term sustainability, the concept typically involves three dimensions which cover economic, social, and environmental factors. These factors include multiple indicators, ranging from avoiding the depletion of natural resources, addressing climate change, and protecting biodiversity to societal factors such as creating and maintaining jobs, and enabling community benefits. Both long-term sustainability as well as sustainable development, which typically includes the various processes and pathways to achieve it, are of importance as clean energy projects ramp up at scale.

Over time, there has been significant progress in the development of project-level sustainability assessment methodologies, including the long-standing Leadership in Energy and Environmental Design (LEED) rating system for buildings and more recent Envision and BREEAM Infrastructure rating systems for infrastructure projects. Building on these efforts, the American Society of Civil Engineers is developing a Sustainability Infrastructure Standard. These frameworks serve as foundational tools for assessing

sustainability in various projects, offering valuable insights into environmental, social, and economic impacts and benefits.

Despite the advancements in sustainability assessment methodologies, project sustainability frameworks have not been extensively applied to hydrogen projects. This gap highlights the need for more experience to refine the methods used to assess individual indicators for specific hydrogen projects. Additionally, there is a pressing need for general guidelines on how to effectively apply these frameworks to different types of hydrogen projects in a consistent manner. These frameworks and methods must adequately capture the sustainability performance of hydrogen projects, considering their unique and emerging challenges and opportunities. The resulting case studies can provide lessons learned, templates, and best practices to guide future real-world deployments and develop tools for training and workforce development.

The GUIDE-H2 Competition aims to address the gaps described above by incentivizing innovative, comprehensive assessment methods and developing practitioner experience in assessing and optimizing the sustainability of hydrogen projects. By encouraging competitors to apply and refine sustainability assessment methodologies in the context of hydrogen production, distribution, and utilization projects, the competition seeks to advance the state of sustainability assessment in the hydrogen sector. Through this initiative, competitors will not only contribute to the advancement of hydrogen project evaluation methods but also to the broader field of sustainability assessment in general. This document summarizes application guidelines for the 2025 GUIDE-H2 Competition.

2.2 Competition Phases

The GUIDE-H2 Competition contains two phases:

Phase I – Concept

In Phase I, competitors must outline their chosen case study for a commercial-scale clean hydrogen project, including the project scope, sustainability framework, assessment methodology, and the specific indicators they will assess. They should also describe their team's structure, highlighting their members' diverse expertise and relevant experience, as well as commitment to inclusivity. For submissions from individual applicants, descriptions of their background and relevant experience should be provided. Finally, they must present the potential impact of the case study on the field of sustainability frameworks/assessments and discuss how it will benefit and be replicated within the hydrogen industry. Teams are encouraged to address specific examples such as, but not limited to, minimizing water use, environmental impacts, and community benefits such as reducing pollution and providing health and societal benefits. This Phase sets the stage for the practical application of the proposed sustainability assessment approach in Phase II. Up to six Phase I winning teams will receive $10,000 each in cash and will be eligible to compete in Phase II.

Phase II – Case Study

In Phase II, teams will apply their proposed methodology and assessment framework to their selected Phase I clean hydrogen project, detailing their chosen indicators and the rationale behind any exclusions. They will also explain their scoring system and describe the analytic tools and methods used. Teams will present an innovative framework for identifying and categorizing sustainability achievements and suggesting best practices for stakeholder engagement and future assessments. Additionally, they will discuss how their assessments could improve hydrogen projects in terms of project success and

sustainability and outline the anticipated practical benefits of their approach. This Phase focuses on the application of their sustainability assessments and their potential impact on the industry. At the end of Phase II, up to 3 winning teams will receive $20,000, $40,000, and $80,000 in cash (for third, second, and first place, respectively) and will be invited to present at various high-profile venues such as the CEM Ministerial, webinars, and the DOE Hydrogen Program Annual Merit Review meeting in Washington, D.C.

2.3 Competition Goal and Case Study Requirements

Only submissions relevant to the goals of this program are eligible to compete. The Competition Administrator must conclude that all the following statements are true when applied to the submission:

- The proposed case study project is directly related to the clean hydrogen industry.
- The case study and proposed methodology provide an innovation contribution to the hydrogen industry and to existing sustainability assessment methods and capabilities.
- The proposed solution is not dependent on new, pending, or proposed federal, state, or local government legislation, resolutions, appropriations, measures, or policies.
- The proposed case study does not involve the lobbying of any federal, state, or local government office.
- The proposed approach is based on fundamental technical principles and is consistent with a basic understanding of hydrogen technologies, sustainability frameworks, and the hydrogen industry.

The clean hydrogen project case study can be a real-world project, a planned project, or a theoretical project.[4] In addition, the project is typically a single facility or cluster of facilities which can include any set of components across the hydrogen supply chain (e.g., production, delivery, end-use), or all aspects across the value chain for either a single use or multiple uses and revenue streams. While full supply chain factors can be included as relevant to the project description, the assessment case study must focus on a discrete project. For example, if the case study is a hydrogen production facility, the focus of the assessment is the production facility itself, even though the ultimate social, economic, and environmental benefits or costs/burdens may depend upon the means of hydrogen delivery and the end-use applications using the hydrogen. The project case study must include a central stakeholder (real or theoretical/proposed) as well as additional involved stakeholders or stakeholders influenced by the project (contractors, community groups, tribal entities, customers, environmental groups, investors, etc.). Theoretical case studies should include descriptions of technical feasibility, supported by reputable technology assessments, as well as descriptions of a central stakeholder and additional involved stakeholders that provide insights into real-world social contexts. As in the case for Envision and BREEAM Infrastructure, the sustainability evaluation process would be applied across the full lifecycle of the

[4] Clean hydrogen has been defined differently through various frameworks and national standards or roadmaps, as discussed here: https://www.iea.org/reports/towards-hydrogen-definitions-based-on-their-emissions-intensity. In the US, the Clean Hydrogen Production Standard has identified a target of 4.0 kgCO2e/kgH2 for life cycle or "well-to-gate" greenhouse emissions associated with hydrogen production (https://www.hydrogen.energy.gov/library/policies-acts/clean-hydrogen-production-standard).

project (from conception through end of life, including any decommissioning and restoration) and would be closely integrated with standard project management practices relied upon to develop the project.[5]

The case study and supply chain description should contain the following information at a minimum:

1. Hydrogen production technology such as electrolysis via solar/wind or steam methane reforming with carbon capture and storage (CCS), resources required, amount of hydrogen to be produced (metric tons per day and per year), project location (if known). If a combination of technologies is proposed, details should be provided for all.

2. Hydrogen delivery and/or storage technology such as pipelines, liquefaction and tube trailer delivery, underground salt cavern storage), amount of hydrogen to be transported and/or stored, distance to be transported, use of new or existing infrastructure.

3. End use application(s) such as ammonia production, refinery, steel manufacturing, energy storage and power conversion using turbines or fuel cells, heavy duty transportation, etc. If more than one end use application is envisioned, provide details for each including estimated daily and annual amount of hydrogen to be used for each application (metric tons per day and per year).

4. Any specific challenges may be proposed for assessment in the case study, such as but not limited to lack of local water resources, environmentally sensitive area, air pollution, proximity to disadvantaged or tribal community, specific NEPA challenges, greenfield or brownfield sites, etc. These may be listed for each end use application as relevant.

5. Potential opportunities for mitigating the challenges above as part of the assessment or modification of sustainability framework indicators should be proposed. For example, if the proposed sustainability framework (e.g., Envision or BREEM) does not adequately address issues unique to the hydrogen infrastructure project, the team should propose an approach to address the challenge. For example, if the team has a recommended approach to address specific NEPA or other barriers resulting in an optimal result for various sustainability framework indicators, the applicant should specify.

6. A schematic should be provided that illustrates the proposed case study for Phase I (this may be updated if the team is selected for Phase II).

If the proposed case study is a real-world project, details should be provided such as location, team members, etc. However, teams are encouraged not to provide confidential information.

[5] The term “project” is used here in the context of project management activities related to the construction of commercial-scale hydrogen infrastructure. As reference, the Project Management Institute defines a project as “a temporary endeavor undertaken to create a unique product, service, or result,” and which includes the following project lifecycle phases: feasibility, design, build, test, deploy, close.

2.4 Criteria for Award Selection

The Competition Administrator screens all completed submissions and ensures that the teams are eligible. Then the Competition Administrator, in consultation with HFTO, assigns subject-matter-expert reviewers who independently score the content of each submission. The reviewers will be composed of federal and nonfederal subject-matter experts and representatives from the sustainability/related assessment community or hydrogen industry (or both) with expertise in areas relevant to the competition. Subject matter experts within the CEM H2I, as well as other international and domestic partnerships, including the HIT and offices within DOE may also be used in the review process. The competitors' submission packages will be reviewed according to the criteria described below and in Section 3 for Phase I and Section 4 for Phase II.

The scoring of submissions will proceed as follows:

- Experts will review each submission individually and assess the response from the competitor to each criteria described in the tables in Sections 3 and 4.
- Reviewers will score each narrative report of 0–5, depending on the degree to which the reviewer agrees that the submission fulfills the scoring criteria.
- Each narrative report score, as well as an overall reviewer recommendation score of **0–5**, will be added together to generate a total score for the submission.
- The total scores from each reviewer will be averaged to produce a final score for the competing team/organization. This score will inform the judge's decisions on Competition awards.

The following details provide more guidance on information that competitors should provide and how reviewers will evaluate and score the submission. Reviewers will evaluate submissions by assigning a single score for each scored submission section, based on their overall agreement or disagreement with a series of statements.

0	1	2	3	4	5
Strongly Disagree/ Does Not Address	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree/Fully Addresses

The submission sections to be scored for Phase I (discussed in detail in Section 3) include:

- Project Assessment and Case Study Planning
- Organization and Team Overview
- Anticipated Impact and Outcome
- Overall Reviewer Recommendation

The submission sections to be scored for Phase II (discussed in detail in Section 4) include:

- Case Study Approach and Methodology
- Sustainability Assessment Results
- Case Study Impact and Replicability
- Overall Reviewer Recommendation

2.5 Application Process

All application information must be submitted through the HeroX platform at: https://www.herox.com/GUIDE-H2

- **Phase I: January, 2025, through June 30, 2025**
  To submit a Phase I application, applicants must create an account on the HeroX platform and complete the online submission form, the content of which is outlined in Section 3.

- **Phase II: August 1, 2025, through April 22, 2026**
  One application must be submitted by all parties (jointly) who have agreed to the terms and intent of the GUIDE-H2 Competition. The HeroX platform will include the content outlined in Section 4.

3 Phase One

3.1 Goal

In Phase I, competing teams will propose an innovative assessment approach to evaluate the sustainability of clean hydrogen projects, relying on both existing and/or new assessment frameworks and capabilities, stakeholder input, and real-world data. In Phase I, competitors must outline their chosen case study (e.g., hydrogen production, delivery, storage, end use or all of the above) for a clean hydrogen project, including their sustainability framework, assessment tools, and the specific indicators they will assess.[6,7] They should also describe their team's structure, highlighting their members' diverse, relevant expertise and commitment to inclusivity. Finally, they must present the potential impact of their approach if adopted across the hydrogen industry, as well as how it can be easily replicated by potential future teams, developers, communities, and/or end users. This phase sets the stage for the practical application of their sustainability analysis approach in Phase II.

3.2 Competition awards

Up to six winners receiving $10,000 each.

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[6] Examples of key project-level infrastructure sustainability assessment tools include Envision (https://sustainableinfrastructure.org/envision/use-envision) and BREEAM Infrastructure (https://breeam.com/breeam-infrastructure).
[7] For projects based in the United States, the Argonne GREET model should be used for any greenhouse gas assessments (https://www.energy.gov/eere/greet).

3.3 Process Overview

Phase I consists of the following steps:

1. **Activation and Submission** – Competitors will propose an innovative and applicable approach to assessing the sustainability (economic, societal, environmental, etc. aspects) of a clean hydrogen project, identifying specific indicators for assessment and their team's diverse expertise. They should also present the potential broader impact of their assessment and its replicability within the industry, establishing a basis for practical sustainability evaluations that may be used for large-scale, real-world deployments. Competitors must complete their submission packages and submit them online before the phase closes.

2. **Assessment** – The Competition Administrator screens submissions for eligibility and completion and assigns subject-matter expert reviewers to independently score the content of each submission. The reviewer criteria assess the following elements of the competitors Phase I submission materials:

    a. **Project Assessment and Case Study Planning**: Competitors should describe their envisioned case study (which part or parts of the hydrogen value chain, including end uses, geographical region, required resources including water, land, etc.), how they will employ a robust sustainability framework and which specific assessment indicators they will assess for clean hydrogen projects.

    b. **Organization and Team Overview:** Competitors should provide a comprehensive outline of their team's organizational structure, detailing the diverse, relevant experience and inclusivity of team members and stakeholders. Teams that include a range of stakeholders (e.g., industry, environmental groups, communities, disadvantaged communities, or others) are encouraged.

    c. **Anticipated Impact and Outcome:** Competitors are asked to explain their innovative approach to the clean hydrogen sustainability assessment, its expected impact, and how it can be replicated and applied within the industry for real-world, at-scale deployments.

3. **Announcement** – After the winning teams are publicly announced, the Competition Administrator will contact the winners and request the information necessary to distribute the cash awards. After winning Phase I, competitors will further develop their methodology and case study in accordance with their plan to compete in Phase II.

3.4 What to Submit

A complete submission package for Phase I should include the following items, each described below in more detail:

- Cover page
- Project Narrative, which includes three reports:
    - Project Assessment and Case Study Planning (maximum of four pages, single-spaced, 12-point font)
    - Organization and Team Overview (maximum of two pages, single-spaced, 12-point font)
    - Anticipated Impact and Outcome (maximum of four pages, single-spaced, 12-point font)

- Summary PowerPoint slide (will be made public)
- Letters of commitment or support (optional)

3.4.1 Cover Page Content

List basic information about the submission, including:

- Project title and short description
- Lead organization or individual name
- Team lead name, phone, email, street address, city, state, and nine-digit zip code
- Team Ttype: individual, for-profit organization, non-profit organization, academic, other (please specify)
- Key project members (names, contacts, and links to their professional online profiles)
- Other partners (if any)
- Case Study information, including:
    - Project scope: supply chain component(s) and hydrogen end-use application(s)
    - Project location
    - Project capacity (metric tons of H2 per day and per year)
    - Key sustainability indicators to be assessed
    - Key stakeholders to be assessed.

3.4.2 Project Narrative and Scoring Criteria

Competitors will submit three project narrative reports for each topic described in the table below. Each report has a word limit, an allowable number of images, figures, or graphs, and criteria for a reviewer score of **0–5**. The reviewers will score the reports, as well as provide an overall reviewer recommendation.

<table>
<tr><th colspan="2">Project Assessment and Case Study Planning

Maximum of 2000 words and 2 supporting images or figures (PDF).
Outline the case study, detailing the comprehensive sustainability framework the team intends to implement and the particular assessment indicators to be applied to evaluate the proposed clean hydrogen project.</th></tr>
<tr><th>Suggested Content Competitor Provides:</th><th>A single score on a scale of 0–5 is provided taking into account the following statements, for a total of 5 points possible:</th></tr>
<tr><td>Project Compliance and Relevance: Detail the selected hydrogen project or case study for evaluation, covering key elements such as hydrogen production, delivery, storage, and end-use, or all the above. and explaining how it fulfills the minimum criteria set out in Section 2.3.
Required Project Components: Describe the project scope, including component sizes and capacities, energy and resource requirements, land area, region or location, and any additional technical specifications or attributes (hydrogen purity, energy inputs, proximity to communities, etc.).</td><td>Project Compliance and Relevance: The competitor accurately outlines their hydrogen project or case study, meeting the requirements of Sections 2.3 and 2.4 and demonstrating its suitability for the proposed sustainability assessment framework.
Problem Identification: The competitor quantifies a critical problem using important metrics and a compelling assessment of why now is the right time to address it. The competitor demonstrates a</td></tr>
</table>

• **Problem Identification:** Provide details on the specific problem(s) to be addressed (e.g., resource availability, cost, lack of infrastructure, etc.) as well as the market context surrounding their chosen project. This should include an identification of the key market players, key local, regional, and national stakeholders, the competitive landscape, and an evaluation of the market trends influencing the project. For example, if the project involves hydrogen fuel cell trucks and stations, the proposed number and potential market size in the specific region. • **Framework Selection**: Explain the sustainability assessment framework the team will utilize and how it will assess societal, economic, and environmental indicators. Describe why the chosen framework is the best fit for the specific case study, including any comparative advantages over other potential frameworks or methodologies. • **Indicator Selection and Rationale**: Identify which sustainability indicators will be applied to the project, which ones will be omitted and provide reasons for any omissions. Offer an in-depth explanation of how you will evaluate each chosen indicator within the context of the sustainability framework and specify any external analytical tools or methodologies you will depend on to conduct the assessment.	solid grasp of the sufficiency of existing guidance and the need for additional guidance to address unresolved analytic methods or issues. • **Framework Selection**: The submission identifies a sustainability assessment framework and logically explains the rationale for its selection, detailing how it will enhance the case study in Phase II. • **Indicator Selection and Rationale**: The submission clearly identifies and justifies the selection and omission of sustainability indicators, directly connecting these choices to the project's goals and demonstrating an understanding of their implications.

Organization and Team Overview

Maximum of 1,000 words and 2 supporting images or figures (PDF).
Provide a comprehensive outline of the team's organizational structure, detailing the diverse experience and inclusivity of team members and stakeholders.

Suggested Content Competitor Provides:	A single score on a scale of 0–5 is provided taking into account the following statements, for a total of 5 points possible:
• **Team and Organization Overview**: Identify and provide detailed backgrounds of the team members, explaining the expertise and experience that each member brings to the project. Describe the organizations involved in the team and their respective roles. • **Team Strengths and Achievements**: Detail	• **Comprehensive Team and Organization Presentation**: The submission clearly identifies all team members and provides detailed backgrounds, effectively illustrating the expertise and experience each member

the team's diversity and its track record of innovation and problem-solving. Describe past experiences where the team has successfully implemented new ideas, tackled challenging issues, and overcome obstacles to turn concepts into reality. • **Team Motivation for Participation**: Explain why the team has chosen to enter the competition, including the benefit to the team. Why is the team uniquely placed to address the project and problem identified in Question 1.	contributes. The roles of involved organizations are well-defined and directly relevant to the project. • **Demonstrated Team Strengths and Successes**: The submission showcases the team's diversity and a robust track record of innovation and problem-solving. It includes specific examples of past projects where the team successfully introduced new ideas, resolved complex issues, and overcame significant challenges. • **Clear and Compelling Motivation for Participation**: The submission articulates a clear and compelling reason for the team's participation in the competition.

Anticipated Impact and Outcome Maximum of 2,000 words and 5 supporting images or figures (PDF). Explain the innovative approach to clean hydrogen sustainability assessment, its expected impact, and how it can be replicated and applied within the industry.	
Suggested Content Competitor Provides • **Stakeholder Impact**: Discuss the relevant stakeholders for the project. How would the proposed assessment benefit the targeted stakeholders and improves sustainability practices? • **Expected Impact**: Discuss the expected impact of the sustainability assessment on the clean hydrogen industry, including any advancements in environmental justice (EJ) criteria integration. Highlight how the Assessment will establish a precedent for impact assessments. Discuss how the project will lead to real-world improvements in sustainability practices for stakeholders. • **Replicability**: Explain how the assessment can be used as a foundation for further work, ensuring that it is practical and can be adopted by others for real-world projects.	**A single score on a scale of 0–5 is provided taking into account the following statements, for a total of 5 points possible:** • **Stakeholder Impact:** The competitor effectively identifies stakeholders (including underserved communities, environmental groups, and others that may not typically be engaged early on during projects), and clearly describes the assessment's benefits and other impacts for these stakeholders, directly linking the improvements to sustainability practices. • **Expected Impact:** The submission outlines the specific impacts on the clean hydrogen industry, including EJ enhancements, and illustrates how the project could serve as a model for future assessments.

• **Community Benefit**: If applicable, identification of the project's role in a disadvantaged community and the direct benefits for that community.	• **Replicability:** The competitor presents a clear plan for how their assessment method can be adopted by others, highlighting its practical application. • **Community Benefit:** The competitor specifies how the project would advantageously impact disadvantaged communities and outlines the expected concrete benefits.[8]

Overall Reviewer Recommendation Competitors do not submit a report for this scoring criteria.	
• The overall Reviewer Recommendation score is an overall assessment of all materials submitted in HeroX.	**A single score on a scale of 0–5 is provided, taking the following statement into consideration:** • The team and proposed assessment plan should be strongly considered for a Phase I award and allowed to compete in the Phase II competition.

3.4.3 Submission Summary Slide (Will Be Made Public)

Provide a public-facing, one-slide submission summary that introduces the team and/or organization and the mission. This should include the specific hydrogen project and proposed sustainability framework. There is no template, so competitors 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-point font.

3.4.4 Letters of Support or Commitment (Optional)

Attach one-page letters (letters of support, intent, or commitment) from relevant entities to provide context. Letters of support from partners or others that are critical to the success of the proposed solution will likely increase the score. General letters of support from parties that are not critical to the execution of the solution will likely not factor into the score. Please do not submit multipage letters.

3.5 How We Determine and Award Winners

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 nonfederal subject-matter experts and representatives from the utility partners with expertise in areas

[8] Detailed information on disadvantaged communities can be found using the Climate and Economic Justice Screening Tool (CEJST), available here: https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5.

relevant to the competition. They will review the competitor's submission package according the criteria above.

3.5.1 Reviewer Panel Scoring

The scoring of submissions will proceed as follows:

- Experts will review each submission individually and assess the response from the competitor to each project narrative report and criteria described in the tables in Section 3.4.2.
- Reviewers will score each report on a scale of 0–5, depending on the degree to which the reviewer agrees that the submission reflects the statements for consideration.
- Each report score will be added together to generate a total score for the submission.
- The total scores from each reviewer will be averaged to produce a final score for the competing team/organization. This score will inform the judge's decisions on prize awards.

3.5.2 Interviews

DOE may decide to interview a subset of competitors. 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 competitor's likelihood to win.

3.5.3 Final Determination

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

3.5.4 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.

4 Application Process: Phase Two

4.1 Goal

In Phase II, competing teams will implement the assessment approach proposed in Phase I by evaluating the proposed case study. In their narrative reports, the teams will describe their approach and methodology, the results of the sustainability assessment, and the potential impact and replicability of the assessment. The narrative reports should describe the development and utilization of the novel or improved approach and methodology that will prove useful to the broader sustainability assessment community and hydrogen industry, contributing to the structure of rating system criteria relevant to hydrogen projects, and establishing a case study precedent that can be drawn upon and replicated to improve the quality of future assessment activities.

4.2 Competition awards

Three winners will receive $20,000 (third place), $40,000 (second place), and $80,000 (first place).

4.3 Process Overview

Phase II consists of the following steps. Because the GUIDE-H2 Competition is being issued as a pilot, the following sections may be revised based on selection of Phase I winners and feedback from reviewers.

1. **Progress and Submission** – Competitors will develop and present a case study based on their Phase I proposal for a clean hydrogen sustainability assessment, detailing their selection of indicators, exclusions, and scoring methods, and discuss the results and strategic benefits. Competitors complete their submission packages and submit online before the phase closes.

2. **Assessment** – The Competition Administrator screens submissions for eligibility and completion and assigns subject-matter expert reviewers to independently score the content of each submission. The reviewer criteria assess the following competitor project narrative reports:

    a. **Case Study Approach and Methodology:** Competitors will summarize their clean hydrogen project assessment approach, sustainability indicators, rationales for exclusions, rating results, and the analytical tools and methods applied.

    b. **Sustainability Assessment Results:** Competitors will present the outcomes of their sustainability analyses, offer guidelines for classifying sustainability achievements, explain the application of assessment methods for hydrogen projects, and provide guidelines for future assessments.

    c. **Impact of Assessment:** Competitors will describe how their assessment processes and results can enhance hydrogen project development and sustainability, detail the impact of their innovative strategies and discuss anticipated real-world benefits of their assessments.

3. **Announcement** – After the winners are publicly announced, the Competition Administrator notifies them and requests the necessary information to distribute cash awards.

4.4 What to Submit

A complete submission package for Phase II should include the following items, each described below in more detail:

- Cover page
- Project narrative (will be made public for winning teams), including three reports:
    - Case Study Approach and Methodology (maximum of six pages, single-spaced, 12-point font)
    - Sustainability Assessment Results (maximum of eight pages, single-spaced, 12-point font)
    - Case Study Impact and Replicability (maximum of six pages, single-spaced, 12-point font)
- Summary PowerPoint slide (will be made public)
- Letters of commitment or support (optional).

4.4.1 Cover Page Content

List basic information about the submission, including:

- Project title and short description

- Lead organization or individual Name
- Team lead name, phone, email, street address, city, state, and nine-digit zip code
- Team type: individual, for-profit organization, non-profit organization, academic, other (please specify)
- Key project members (names, contacts, and links to their professional online profiles)
- Other partners (if any)
- Case study information, including:
    - Project scope: supply chain component(s) and hydrogen end-use application(s)
    - Project location
    - Project capacity (metric tons of H2 per year)
    - Key sustainability indicators assessed
    - Key stakeholders assessed

4.4.2 Project Narrative and Scoring Criteria

Competitors are required to craft a comprehensive case study assessment that encapsulates their approach and methodology, the assessment results, and a discussion of case study impacts and replicability. Competitors will submit three project narrative reports for each of these topics, as described in the table below. Each report has a word limit, an allowable number of images, figures, or graphs, and criteria for a reviewer score of **0–5**. The reviewers will score the reports as well as provide an overall reviewer recommendation. For winning teams, all three project narrative reports will be made public in a single document.

<table>
<tr><th colspan="2">Case Study Approach and Methodology

Maximum of 3,000 words and 3 supporting images or figures (PDF)
Will be made public for winning teams.</th></tr>
<tr><td>The hydrogen sustainability assessment should include the following information:

Case Study Approach and Methodology: Competitors should summarize their hydrogen project assessment approach, sustainability indicators, rationales for exclusions, rating results, and the analytical tools and methods applied. Competitors should consider including the following:

• Project Overview: A summary of the hydrogen project, including main objectives and sustainability challenges addressed.
• Assessment Strategy: The process and criteria for evaluating the project's sustainability, clearly explaining the chosen framework.
• Sustainability Indicators: List and justification for the selected</td><td>A single score on a scale of 0–5 is provided taking into account the following statement, for a total of 5 points possible:

Case Study Approach and Methodology (5 Points): The competitor provides a thorough explanation of their assessment approach, including a clear project overview, a logical assessment strategy, well-substantiated sustainability indicators, a well-defined rating system, detailed analytical methods, and a sound data collection approach.</td></tr>
</table>

sustainability indicators and any excluded, focusing on their relevance to the hydrogen project. • **Rating System**: Outline of the rating system used to measure indicators, with an explanation of the scale and benchmarks. • **Analytical Methods**: Identification of the analytical tools and methodologies employed in the assessment and the rationale for their use. • **Data Collection Approach**: Approach to data collection, sources used, and how data quality is ensured.	

Sustainability Assessment Results Maximum of 4,000 words and 4 supporting images or figures (PDF) Will be made public for winning teams.	
The hydrogen sustainability assessment should include the following information: 1. **Sustainability Assessment Results:** Competitors should present the outcomes of their sustainability analyses, offer guidelines for classifying sustainability achievements, explain the application of assessment methods for hydrogen projects, and provide guidelines for future assessments. Outcomes for theoretical projects should be justified based upon reputable technical assessments and practical, real-world expectations around stakeholder decisions and requirements. • **Results Presentation**: Clearly display the findings from the sustainability assessment of the hydrogen project. • **Achievement Classification**: Propose criteria for categorizing different levels of sustainability achievements. Focus should be on criteria that are difficult to apply to hydrogen projects, having no clear reference for maximum achievement or baseline comparison. • **Methodology Application**: Explain how the assessment methods were applied specifically to hydrogen projects.	**A single score on a scale of 0–5 is provided taking into account the following statement, for a total of 5 points possible:** **Sustainability Assessment Results (5 points):** The submission effectively communicates the results, offering clear guidelines for classifying sustainability achievements and demonstrating how the assessment methods were specifically tailored to hydrogen projects. The competitor also delivers actionable guidance for future assessments.

• **Future Assessment Guidance**: Provide practical guidelines based on current findings to aid future sustainability assessments.	

Case Study Impact and Replicability Maximum of 3,000 words and 3 supporting images or figures (PDF) Will be made public for winning teams.	
The hydrogen sustainability assessment should include the following information: **Case Study Impact and Replicability:** Competitors should describe how their assessment processes and results can enhance hydrogen project development and sustainability, detail the impact of their innovative strategies and discuss anticipated real-world benefits of their assessments. The case study should also convey how the results can bolster clean hydrogen project development and sustainability, discuss the impact of their innovative strategies, and speculate on the real-world benefits their assessments might deliver • **Future Project Development:** Describe how the assessment can improve similar hydrogen project development and its ongoing sustainability. • **Strategy Impact:** Outline the positive effects of innovative strategies used during the assessment. • **Real-World Benefits:** Discuss the expected tangible benefits that the assessment outcomes could deliver in real-world scenarios. • **Stakeholder Benefits:** Discuss potential impacts on stakeholders, explaining how results may affect different groups and detailing expected changes in stakeholder engagement and outcomes as a result of implementing sustainability strategies.	**A single score on a scale of 0–5 is provided taking into account the following statement, for a total of 5 points possible:** **Impact of Assessment (5 Points):** The competitor offers a compelling description of how the assessment can advance hydrogen project development and sustainability. They detail the impact of robust and innovative strategies employed and discuss the real-world benefits, with a particular emphasis on the anticipated positive effects on stakeholders and how the results could shape stakeholder engagement and outcomes.

Reviewer Recommendation Competitors do not submit a report for this scoring criteria.	
• The overall Reviewer Recommendation score is an overall assessment of all materials submitted in HeroX.	**A single score on a scale of 0–5 is provided, taking the following statement into consideration:** • The team and narrative reports should be strongly considered for a Phase II Competition award.

4.4.3 Submission Summary Slide (Will Be Made Public)

Provide a public-facing, one-slide submission summary that introduces the team and/or organization and the mission. The content should include key take-aways from the Phase II project narrative reports. There is no template, so competitors 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-point font.

4.4.4 Letters of Support or Commitment (Optional)

Attach one-page letters (letters of support, intent, or commitment) from relevant entities to provide context. Letters of support from partners or others that are critical to the success of the proposed solution will likely increase the score. General letters of support from parties that are not critical to the execution of the solution will likely not factor into the score. Please do not submit multipage letters.

4.5 How We Determine and Award Winners

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 nonfederal subject-matter experts and representatives from the utility partners with expertise in areas relevant to the competition. They will review the competitor's submission package according the criteria above.

4.5.1 Reviewer Panel Scoring

The scoring of submissions will proceed as follows:

- Experts will review each submission individually and assess the response from the competitor to each project narrative report and criteria described in the tables in Section 4.4.2.
- Reviewers will score each report on a scale of 0–5, depending on the degree to which the reviewer agrees that the submission reflects the statements for consideration.
- Each report score will be added together to generate a total score for the submission.
- The total scores from each reviewer will be averaged to produce a final score for the competing team/organization. This score will inform the judge's decisions on prize awards.

4.5.2 Interviews

DOE may decide to interview a subset of competitors. 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 competitor's likelihood to win.

4.5.3 Final Determination

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

4.5.4 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.

Appendix 1: Additional Terms and Conditions

A.1 Requirements

Your submission for the GUIDE-H2 Award is subject to the following terms and conditions:

- You must post the final content of your submission or upload the submission form online by 5 p.m. ET on June 30, 2025, before the award's Phase One 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 10 of Appendix 1 (Section A.10). 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 Competition Administrator may disqualify your submission after an initial screening if you fail to provide all required submission elements. Competitors 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 award 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 award described here and no other award on the HeroX platform or anywhere else.
- The Competition Administrator, when feasible, may give competitors an opportunity to fix nonsubstantive 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 award. I understand that the information contained in this submission will be relied on by the federal government to determine whether to issue an award to the named competitor. I certify under penalty of perjury that the named competitor meets the eligibility requirements for this award 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, and 31 U.S.C. §§ 3729-3733 and 3801-3812.

A.2 Verification for Payments

The Competition Administrator will verify the identity and role of all competitors before distributing any awards. Receiving an award payment is contingent upon fulfilling all requirements contained herein. The Competition Administrator will notify winning competitors using provided email contact information for the individual or entity that was responsible for the submission. Each competitor will be required to sign and return to the Award 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 Competition Administrator, a winning competitor will be disqualified from the competition and receive no award 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 competitor. 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 competitors may be required to show proof of being the authorized account holder.

A.3 Teams and Single-Entity Awards

The Competition Administrator will award a single dollar amount to the designated primary submitter, whether consisting of a single or multiple entities. The primary submitter is solely responsible for allocating any award funds among its member competitors or teammates as they deem appropriate. The Award Administrator will not arbitrate, intervene, advise on, or resolve any matters or disputes between team members or competitors.

A.4 Submission Rights

By making a submission and consenting to the rules of the contest, a competitor is granting to DOE, the Competition Administrator, and any other third parties supporting DOE in the contest, a license to display publicly and use the parts of the submission that are designated as “public” for government purposes. This license includes posting or linking to the public portions of the submission on the Competition Administrator or HeroX applications, 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, Competition Administrator, and judges and reviewers for purposes of the contests, including but not limited to screening and evaluation purposes. The Competition Administrator and any third parties acting on their behalf will also have the right to publicize competitors’ names and, as applicable, the names of competitors’ team members and organization, which participated in the submission on the contest website indefinitely.

By entering, the competitor represents and warrants that:

1. The competitor’s entire submission is an original work by the competitor and the competitor 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 Competition Administrator and/or disclosed by the competitor in the submission, and (ii) competitor 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 Competition Administrator, or the exercise by Competition Administrator of any of the rights granted by competitor 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 competitor to work on the submission or who appear in the submission in any manner have:
    a. Given the competitor 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 competitor's child, competitor must have the permission of the minor's parent or legal guardian) and the competitor may be asked by the competition 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 competitor represents and warrants that the competitor is the sole author and copyright owner of the submission; that the submission is an original work of the competitor or that the competitor 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 competitor 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 Competition Administrator will arbitrate, intervene, advise on, or resolve any matters between team members or among competitors.

A.8 Publicity

The winners of these awards (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.

In accordance with the delegation of authority to run this contest delegated to the judge responsible for this award, the judge has determined that no liability insurance naming DOE as an insured will be required of competitors to compete in this competition per 15 U.S.C. § 3719(i)(2). Competitors 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 application. 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 application 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.

Competitors will be notified of any Freedom of Information Act requests for their submissions in accordance with 29 C.F.R. § 70.26. Competitors 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."

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 contest, or any part of it, at any time. If any fraud, technical failure, or any other factor beyond DOE's reasonable control impairs the integrity or proper functioning of the contests, as determined by DOE in its sole discretion, DOE may cancel the contest. Any performance toward contest goals is conducted entirely at the risk of the competitor, and DOE shall not compensate any competitors for any activities performed in furtherance of this award.

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

DOE may conduct a risk review, using Government resources, of the competitor and project personnel for potential risks of foreign interference. The outcomes of the risk review may result in the submission being eliminated from the award competition. This risk review, and potential elimination, can occur at any time during the prize competition. An elimination based on a risk review is not appealable.

A.13 Program Policy Factors

While the scores of the expert reviewers will be carefully considered, it is the role of the award judge to maximize the impact of award funds. Some factors outside the control of competitors 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 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 technological or programmatic diversity when compared to the existing DOE project portfolio and other competitors.
- The degree to which the submission is likely to lead to increased employment and manufacturing in the United States 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 competitors 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 toward enabling a just and equitable clean energy economy in their region and/or community.

A.14 National Environmental Policy Act Compliance

This award 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 Inclusive Energy Innovation Award 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 award competition. Participants may be asked to provide DOE with information on fabrication and testing of their device such that DOE can conduct a meaningful evaluation of the potential environmental impacts.

A.15 Definitions

Competition Administrator means both the Alliance for Sustainable Energy operating in its capacity under the Management and Operating Contract for NREL and HFTO. When the Competition Administrator is referenced in this document, it refers to staff from both the Alliance for Sustainable Energy and HFTO staff. Ultimate decision-making authority regarding award matters rests with the Director of HFTO.

A.16 Return of Funds

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

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