

**Department of Energy (DOE)  
Office of Clean Energy Demonstrations (OCED)**

Broad Agency Announcement (BAA) Number:

Type:

Assistance Listing Number: 81.255 if applicable.

Issue Date:	9/14/2023
Submission Deadline:	10/26/2023 by 6:00 pm ET
Expected Date for DOE Selection Notifications:	11/30/2023

- The Department of Energy (DOE) seeks to select an entity or entities to administer a new demand-side support program designed to accelerate commercialization of, and demonstrate the production, processing, delivery, storage, and end-use of clean hydrogen at the DOE-funded Regional Clean Hydrogen Hubs (H2Hubs).
- DOE is posting this announcement for the purpose of soliciting proposals from entities positioned to administer the demand-side support program structured and funded by DOE.
- The selected entity or entities would provide input to and oversee the administrative functions of DOE-designed demand-side support mechanisms. The selected entity (or entities) is expected to interact with H2Hubs to accelerate commercialization and adoption of clean hydrogen using one or more demand-side mechanisms.
- **Eligible Entity.** The selected entity (or entities) will be a not-for-profit entity organized under the laws of the United States, its states, territories, and possessions. Its primary place of business will be within the United States, its territories, or possessions. Any selected entity must be led by U.S. nationals.
- **Ineligible Entity.** Neither federal corporations nor instrumentalities are eligible. No entity that is directly or indirectly owned, controlled, or subject to the jurisdiction of a foreign government, or owned or controlled by a foreign entity is eligible.
- The selected entity (or entities) will be subject to conflict-of-interest requirements and will have no beneficial financial corporate or contractual relationship with the H2Hubs recipients.
- DOE may hold discussions with one or more respondents to this BAA. These discussions may lead to the selection of an entity and the negotiation of a framework agreement between DOE and the selected entity that establishes the contractual relationship between DOE and that entity, including provisions for funding transfers and DOE oversight over programming and funds. DOE may subsequently issue task orders or funding agreements

against that framework agreement for the purposes of funding and executing the expected demand-side support mechanism for clean hydrogen.

- The selected entity or entities will be funded to support hydrogen projects affiliated with the H2Hubs program. DOE anticipates the overall program will be at least 5 years in duration. DOE anticipates full program funding for the 5-year term to be between \$500 million and \$1 billion. DOE anticipates the framework agreement with the entity (or entities) will be for a 5-year term with a one-time agreement extension for an additional 5-year term.
- Based on demonstrated performance and experience gained with the H2Hubs Demand-Side Support program, DOE may consider similar demand-side mechanisms for other technologies and clean energy products in the future.
- Submission of responses to this BAA does not guarantee that any potential selectee(s) will be issued an agreement.
- DOE shall not reimburse any costs associated with responding to this BAA. For any selected entity, DOE will not reimburse costs associated with developing a framework agreement between DOE and the selected entity.
- The selected entity or entities will negotiate an Other Transaction Agreement with DOE pursuant to DOE's 42 U.S.C. § 7256(a) or a Partnership Intermediary Agreement pursuant to 15 U.S.C. § 3715 in support of H2Hubs activities authorized by BIL § 40314 (42 U.S.C. § 16161a).

**Background:** DOE is exploring entering into one or multiple agreements with independent, not-for-profit U.S. entities to assist in the de-risking of clean hydrogen through demand certainty or other means. DOE envisions that these measures would accelerate commercialization of clean hydrogen by providing medium-term revenue certainty to projects affiliated with DOE-selected Regional Clean Hydrogen Hubs.<sup>1</sup>

Demand-side support represents a potential tool to achieve DOE's authorization to accelerate commercialization of the production, processing, delivery, storage, and end-use of, clean hydrogen by providing predictability in the commercial market for early deployments. Demand-side support measures have accelerated commercial scale-up of technologies in clean energy and for other critical products and services, both in the United States and abroad.<sup>2</sup>

These measures address a basic issue in scaling up clean energy technology: deployment drives cost reductions, but early deployment depends on demonstrated demand, which is hard to secure

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<sup>1</sup> DOE plans to announce H2Hubs selections in Fall 2023.

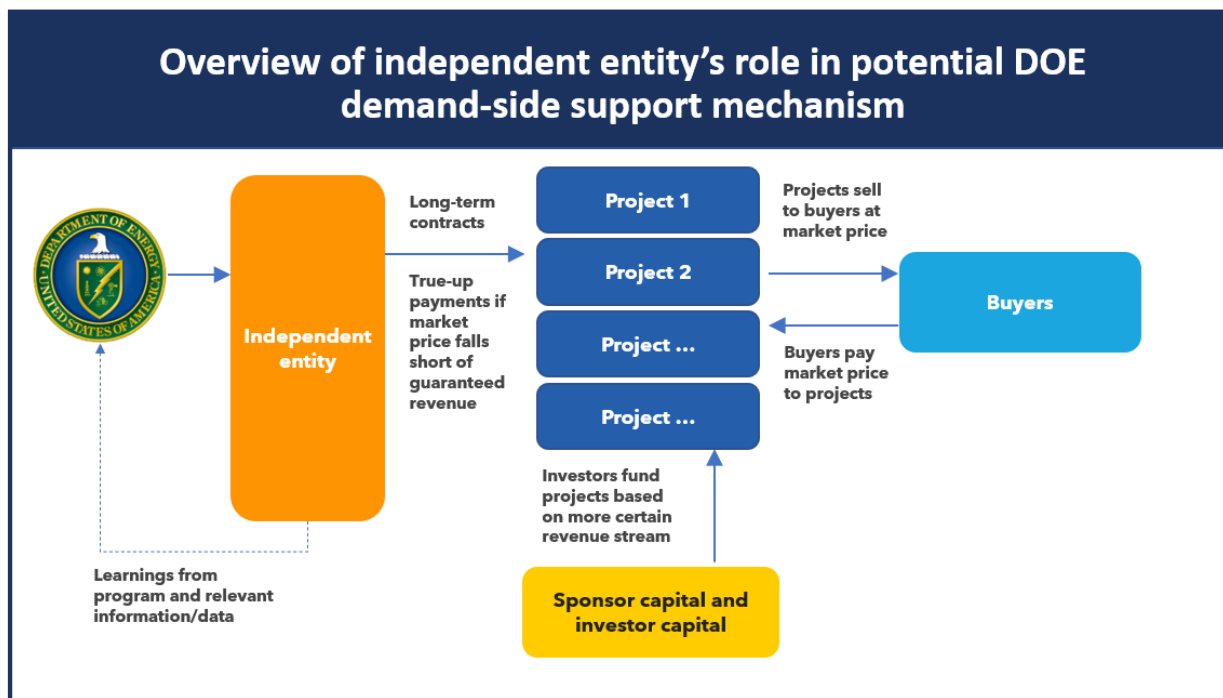
<sup>2</sup> Demand-side measures have been used in the US for COVID-19 vaccine development and commercial space flight. UK demand-side support for Offshore Wind has been credited with aiding commercialization of that technology in the UK.

while costs are still high and markets are still nascent. Demand-side support also addresses a fundamental mismatch in some markets between producers, who need long-term certainty of high-volume demand in order to secure financing to build a project, and buyers, who often prefer to buy on a short-term basis at more modest volumes, especially for products that have yet to be produced at scale and are expected to see cost decreases, like clean hydrogen.

A February 2023 DOE Request for Information (RFI) surfaced widespread support for DOE engaging in demand-side support to accelerate clean energy deployment. RFI respondents highlighted clean hydrogen, along with its resultant derivatives and products, as an area in particular need of firm, committed offtake or an offtake support/backstop to facilitate market liftoff. Several recent studies in clean hydrogen have echoed these findings.<sup>3, 4</sup>

RFI responses and market research also identified a potential role for an independent not-for-profit U.S. entity to administer the demand-side support program. Such an entity would partner with DOE to provide the market, commercial contracting, and operational expertise needed to execute demand-side support or other commercialization measures designed by DOE.

For example, DOE could design and fund a revenue backstop mechanism for a specific type of clean hydrogen project and the entity would execute the mechanism, serving as the counterparty for selected projects and making payments to these projects according to the rules of the program. Types of mechanisms include, but are not limited to, fixed \$/kg adder contracts, pay-for-difference contracts, and revenue puts / insurance.



<sup>3</sup> DOE, "Pathways to Commercial Liftoff: Clean Hydrogen" (March 2023)

<sup>4</sup> DOE, "U.S. National Clean Hydrogen Strategy and Roadmap" (June 2023)

*FIGURE 1: Diagram illustrating how an independent entity would implement a DOE-designed guaranteed revenue agreement with projects. This represents one of several demand-side or market-supporting mechanisms that the independent entity could implement on behalf of DOE.*

In July, DOE released a Notice of Intent (NOI) and Request for Information (RFI) on its plans to implement demand-side support measures for clean hydrogen as part of the Regional Clean Hydrogen Hubs program.

Respondents to the RFI emphasized the need to account for regional and market differences between H2Hubs awardees (e.g., presence or lack of hydrogen transport and storage infrastructure, prioritized end uses).

To account for these regional and market factors, DOE will rely heavily on input from H2Hubs awardees to structure the program. The details of H2Hubs involvement will be explicitly defined in agreements between DOE and the independent implementing entity but could include formal mechanisms and regular informal input between DOE, the implementing entity, and representatives from the H2Hubs.

**Description:** DOE is interested in selecting one or more independent (i.e., non-government), U.S.-based, not-for-profit entities to support and execute clean hydrogen demand-side support mechanisms. Respondents to this solicitation may represent an existing or a to-be-established entity, as long as the proposed entity would be formally established ahead of the Design Phase activities described below.

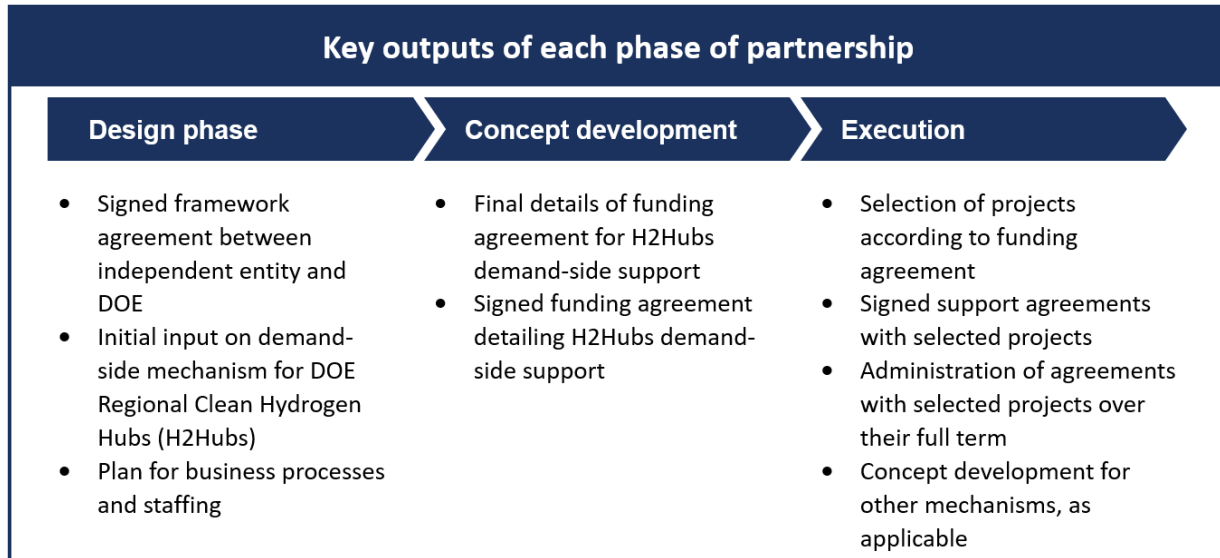
The selected entity or entities would execute demand-side programs and other support measures designed and funded, in part, by DOE to create demand certainty for clean hydrogen projects and facilitate market formation. The selected entity or entities could be a single national entity, several regional entities, or several entities responsible for different phases (e.g., design vs. execution).

Potential activities for an independent not-for-profit U.S. entity include, but are not limited to:

- Applying experience in commodity markets, project finance, and commercial contracting to advise DOE on the design of demand-side measures to support projects affiliated with the H2Hubs;
- Executing a DOE-designed and funded demand-side mechanism to support projects affiliated with the H2Hubs, including accepting and distributing DOE funds to selected projects;
- Implementing a competitive process designed by DOE for selection of projects or companies for demand-side support;
- Executing and managing financial agreements with selected recipients of demand-side support; and
- Engaging with clean energy developers, investors, Government partners, academic institutions, community groups, labor, non-traditional partners, and other stakeholders to inform and support DOE demand-side activities to support commercial liftoff for clean hydrogen.

## Design, Concept Development, and Execution Phases:

DOE envisions a phased approach to working with an independent U.S. not-for-profit entity (or entities) on a demand-side support measure to support H2Hubs program. Before advancing from one phase to the next, DOE will conduct a thorough evaluation to ensure that the entity is prepared to execute on subsequent phases. This review will include the initial evaluation criteria outlined below updated to reflect the needs of subsequent phases and taking into account the entity's performance prior to the review.



*FIGURE 2: Key outputs of each phase of DOE's partnership with an independent entity or independent entities. The design phase will focus on the terms and conditions governing the relationship between DOE and an independent entity.*

The first phase, the design phase, will allow DOE and an independent entity to further define the specifics of their relationship, including how the demand-side support measure DOE is interested in executing in clean hydrogen could be implemented by the entity.

An independent entity responsible for the design phase must be capable of undertaking the following activities:

- Developing a Framework agreement with DOE that defines the relationship between DOE and the entity, including governance and oversight controls to ensure effective and impartial execution of DOE-supported demand-side support, or other market-supporting mechanisms, for clean hydrogen. DOE will develop a general draft agreement for negotiation with the selected entity;
- Providing substantive input to DOE on demand-side support, specifically H2Hub-affiliated activity;
- Acting as a credible and impartial stakeholder with investors, clean energy developers, and other stakeholders to gather input on the most catalytic demand-side or other market-supporting mechanisms for clean hydrogen at H2Hub-affiliated projects; and

- Developing business processes and a staffing plan to effectively and impartially execute and manage long-term (e.g., 5-year) financial agreements with clean energy projects, specifically for clean hydrogen at H2Hub-affiliated projects.

The concept development phase will involve the following activities:

- Working with DOE to develop specific demand-side support mechanisms for H2Hubs, including but not limited to: determination of eligible projects, selection method for projects, terms of contract to be signed with supported projects, and detailed financial analysis to size the program;
- Conducting extensive and detailed engagement with H2Hub awardees, the private sector, and other stakeholders to refine the mechanism, including standard support agreement terms; and
- Negotiating the details of a funding agreement with DOE that will provide funds and instructions to execute the demand-side mechanism.

An independent entity or entities responsible for the execution phase must be capable of undertaking the following activities:

- Implementing the competitive process to select supported projects as outlined in the funding agreement;
- Negotiating and signing support agreements with selected projects according to the terms of the funding agreement;
- Administering agreements with selected projects over their full tenor according to the terms of the funding agreement; and
- Providing regular information, data, feedback, and updates to DOE and the public as outlined in the framework and funding agreements.

## **CONCEPT PAPER REQUIREMENTS**

DOE is requesting interested entities, or partners interested in establishing an appropriate entity, express their interest by submitting a concept paper outlining their capabilities to partner with DOE on implementing demand-side support and other market support measures.

Concept papers shall not exceed 20 pages, must be in PDF format, and should succinctly address the entity's ability to implement demand-side support.

Concept papers should identify the following:

1. Name, address and entity type address of organization.
2. Name, address, email, and phone number for the points of contact for the entity.
3. Name and address of proposed team members or partnering organization(s), entity type and contact information.

4. Background on the existing organization or proposed new organization, as relates to the DOE areas of interest in this BAA, and statement of interest in partnering with DOE on this opportunity.
5. Summary of the organization's capability and experience to effectively engage in both the Design Phase and eventual execution phases.
6. Overview of proposed terms and conditions governing the relationship between DOE and the organization, including oversight and accountability controls.
7. Summary of current or proposed operating plan for the organization, especially as it pertains to implementing DOE's program, including talent profiles, headcount, operating budget, and funding plan for an initial 5-year program to support the H2Hubs. This operating plan should also include metrics by which the performance of the entity might be judged on execution of the demand-side support.
8. Summary of the organization's perspective on the form(s) of demand-side support that would best de-risk H2Hub-affiliated projects and catalyze the scale-up of a mature clean hydrogen market using the \$500 million to \$1 billion in anticipated funding for the demand-side initiative. This discussion should specify the details of a proposed mechanism(s) including demand-side support design, the role that the entity would play in the market, types of potential market participants with whom the entity would engage, the types of contracts that the entity would sign with market participants, and how the entity will account for regional or market differences. The organization can focus on one mechanism or multiple complementary mechanisms. This discussion should also include how the organization would propose accounting for anticipated differences between Hub awardees' existing clean hydrogen infrastructure and prioritized end use sectors.
9. Overview of how the organization would propose partnering with and seeking input from relevant organizations in the Regional Clean Hydrogen Hub ecosystem, including the Hubs themselves.
10. Resumes for the senior and key personnel who will contribute to the development and execution of the proposed activities. Each resume must not exceed two pages and does not count toward the 20-page limit.

**Evaluation Criteria:** The evaluation process will include an initial eligibility review and a review of the submitted concept paper by a DOE agreement selection panel. Ultimately, the DOE selection official(s) will consider the recommendations of reviewers and any information gathered through pre-selection oral presentations in determining which, if any, entity to select.

All concept paper submissions must:

- comply with the applicable content and form requirements listed in this BAA;
- include all required documents;

- be successfully submitted to OCED Exchange at <https://oced-exchange.energy.gov/> ;
- be submitted by October 26, 2023 at 6 PM Eastern Time.

DOE will not review or consider submissions submitted through means other than OCED Exchange, submissions submitted after the applicable deadline, or incomplete submissions.

The evaluation criteria will include:

- **Market experience and expertise:** A demonstrated depth and breadth of expertise across key personnel that encompasses commodity markets, project finance, and commercial contracting, especially in clean energy.
- **Operational ability:** The capability of the entity to manage contracts and otherwise execute demand-side support and other market-supporting mechanisms.
- **Ecosystem credibility:** The capability of the entity team to successfully engage with H2Hub awardees, clean energy developers, investors, market participants, Government partners, and other stakeholders, in supporting DOE demand-side efforts.
- **Strength of proposal for demand-side mechanism:** The quality of the proposed mechanism for demand-side support, including the proposed strategy, or strategies, to account for anticipated differences between H2Hub awardees' existing infrastructure and prioritized end use sectors.
- **Business systems and processes:** The capability of the entity to implement business systems, operations, and control systems that ensure sufficient legal, IT, accounting, financial, and management to establish proper oversight, accountability, and compliance and to avoid actual or perceived conflicts of interests.

**NOTICE:** When appropriate, DOE Contractors and their employees may access the concept papers to objectively analyze them and provide comments and recommendations to Government stakeholders. All Covered DOE Support Contract advisors shall comply with procurement integrity laws and rules protecting confidential information. The Government shall take into consideration requirements for avoiding conflicts of interest and ensure advisors comply with safeguarding submission data. Submission of a concept paper constitutes approval to release the submitted information to Covered DOE Support Contract advisors and waives any requirement for separate non-disclosure agreements.

**Pre-selection oral presentations:** DOE may invite some submitters to give oral presentations and answer questions to better determine their qualifications. Oral presentations are not indicative of a selected submission.

If invited for an oral presentation, invited submitter(s) will meet with DOE representatives to provide a presentation on the contents of the submission and to provide DOE an opportunity to ask questions regarding the qualifications of the submitter or the content of their submission. DOE may submit pre-selection clarification questions or request additional information from submitters in advance of oral presentations.



The information provided by submitters to DOE through pre-selection oral presentations and pre-selection clarification questions contributes to DOE's selection decisions.

DOE may arrange to meet with the invited submitters in person at DOE's offices or at a mutually agreed upon location. DOE may also arrange site visits at certain applicants' facilities.

DOE will not reimburse submitters for travel and other expenses relating to the pre-selection oral presentations, nor will these costs be eligible for reimbursement as pre-award costs.

**Proposed Funding and Cost Analysis Mechanisms:** Detailed cost analysis will not be conducted for the purposes of awarding an Agreement under the BAA. As requirements and tasking are identified by DOE (and subject to authorization and funding availability), individual orders will be placed against a framework agreement with the independent entity.

Initial orders will involve implementing a demand-side support mechanism for projects affiliated with DOE's Regional Clean Hydrogen Hubs program.

Individual orders will contain provisions for funding the operations of the entity. Details of how the entity's operations will be funded will be set out in the framework agreement and individual funding agreements between DOE and the independent entity.

**Agreements:** DOE plans to enter into at least one framework agreement with an independent entity. These agreements are anticipated to be an Other Transaction agreement pursuant to 42 USC 7256(a) or a Partnership Intermediary Agreement pursuant to 15 U.S.C. 3715. All selection(s) will be based on the individual merit of the concept paper, responses to pre-selection clarification questions, and oral presentations (as applicable). DOE reserves the right to select all, some, or none of the concept papers received in response to this announcement, and all funding is subject to the availability of appropriations. There is no commitment by DOE to be responsible for any funds expended by the submitter before execution of the framework agreement by DOE. Access and use of certain DOE Facilities may require security clearances and U.S. citizenship.

**Questions/Agency Contacts:** Upon the issuance of a BAA, DOE personnel are prohibited from answering questions (in writing or otherwise) with applicants regarding the BAA except through the established question and answer process as described below or in oral presentations as outlined above. Specifically, questions regarding this BAA must be submitted to: **h2hubs-demand-side@hq.doe.gov**. Questions must be submitted not later than 3 business days prior to the concept paper due date and time. Please note, feedback on individual responses will not be provided through Q&A.

All questions and answers related to this BAA will be posted on OCED Exchange at: <https://oced-exchange.energy.gov/> OCED will attempt to respond questions within 3 business days unless a similar question and answer has already been posted on the website.

**Attachments/Links:**

No attachments or links have been added to this announcement.

**Contact Information:**

Email [h2hubs-demand-side@hq.doe.gov](mailto:h2hubs-demand-side@hq.doe.gov) with any questions or comments on this RFP.