

Clean Energy Careers for All Program

DATE: November 22, 2023

SUBJECT: Request for Information (RFI)

Description

This Request for Information (RFI) seeks public input to inform the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) about its efforts to address the need for a diverse American energy workforce by leveraging organizations that are uniquely qualified to reach underrepresented communities. EERE seeks to understand the most effective ways to engage individuals from groups that are underrepresented in science, technology, engineering, and mathematics (STEM), ¹ especially in ways that promote interest in careers that support the nation's clean energy transition.

Background

The Biden Administration is committed to ensuring that overburdened, underserved, and underrepresented individuals and communities have access to federal resources, and specifically that 40% of the overall benefits of certain federal investments flow to disadvantaged communities, as described in its Justice40 Initiative.² The clean energy transition should advance equity³ for people of color, people with disabilities, and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality. Advancing equity, civil rights, racial justice, and equal opportunity is the responsibility of the entire government. As part of the whole of government approach, DOE is taking proactive steps to lower barriers to entry.

EERE supports research, development, demonstration, and deployment (RDD&D) of renewable energy and energy efficiency technologies. DOE funds RDD&D activities in climate and energy technologies through a variety of mechanisms, including external competitive solicitations and through its 17 national laboratories. In addition, DOE programs support building and sustaining an innovation ecosystem for climate and energy technologies, encompassing early career and workforce development, entrepreneurial programs and resources for individuals and organizations, and

¹ According to the National Science Foundation's 2019 report, "<u>Women, Minorities and Persons with Disabilities in Science and Engineering</u>," women, people with disabilities, and underrepresented minority groups—Black or African American people, Hispanic or Latino people, and American Indians or Alaska Natives—are vastly underrepresented in the STEM fields that drive the energy sector. That is, their representation in STEM education and STEM employment is smaller than their representation in the U.S. population.

² The White House Justice 40 Initiative

³ The term "equity" means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black or African American people, Hispanic or Latino people, Indigenous and Native Americans, Asian Americans and Pacific Islanders and other people of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people; people with disabilities; people who live in rural areas; and those otherwise adversely affected by persistent poverty or inequality. Executive Order 13985, "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government"

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technical and financial assistance for communities and regions.

The Biden Administration has set ambitious goals to address climate change, including achieving by 2030 a 50-52% reduction from 2005-levels in economy-wide net greenhouse gas pollution, and reaching net zero emissions economy-wide no later than 2050.⁴ Achieving these goals requires a combination of innovative solutions, workforce development, and accelerated deployment of climate and energy technologies with justice as a key consideration.

Purpose

The purpose of this RFI is to solicit public feedback about issues related to educational and professional development programming—created and delivered by diverse science and engineering non-profits—that inspires students, alumni, and professionals to explore, pursue, and succeed in STEM-related careers in clean energy. The expansion of the clean energy economy presents an opportunity to include those who have been underrepresented in the clean energy industry.

According to the Pew Research Center's April 2021 report, "STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity," ⁵ "Black and Hispanic workers remain underrepresented in the science, technology, engineering and math (STEM) workforce compared with their share of all workers, including in computing jobs, which have seen considerable growth in recent years." The study also found a continuing pay disparity in STEM fields between men and women, based on data from various sources.

Earlier this year, DOE released its 2023 *U.S. Energy & Employment Jobs Report (USEER)*. ⁶ Based on surveys of tens of thousands of U.S. energy sector employers, USEER is a comprehensive summary of national and state-level energy jobs, reporting by industry, technology, and region with data on unionization rates, demographics, and employer perspectives on growth and hiring. The report provides demographic data that highlight needs and opportunities to build a more representative workforce as summarized in the following table:

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⁴ FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good- Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies, White House.

⁵ STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity | Pew Research Center

⁶ U.S. Energy & Employment Jobs Report (USEER) 2023

Table 1. United States Energy Workforce Demographics and Characteristics⁷

	Number of Workers	Energy Workforce Average	National Workforce Average
Male	5,757,198	73%	53%
Female	2,065,291	26%	47%
Gender Nonbinary	42,810	<1%	insufficient data
Hispanic or Latino	1,410,187	18%	19%
Not Hispanic or Latino	6,455,112	82%	82%
American Indian or Alaska Native	169,238	2%	<1%
Asian	531,464	7%	7%
Black or African American	721,120	9%	13%
Native Hawaiian or Other Pacific Islander	81,827	1%	<1%
White	5,889,528	75%	77%
Two or More Races	395,173	5%	3%
Unknown Race	76,949	<1%	insufficient data
Veterans	709,961	9%	5%
18 to 29	2,334,990	30%	22%
30 to 54	4,172,277	53%	54%
55 and Over	1,358,033	17%	24%
Disability	180,538	2%	4%
Formerly Incarcerated	96,950	1%	2%
Represented by Unions, Collective Bargaining Agreements, and/or Project Labor Agreements	849,959	11%8	7%

National sources: BLS (2023a, 2023b, 2023c, 2023d), Jobs EQ (2022), Prison Policy (2022)

EERE is specifically interested in information about ways it can best reward the most effective programs of diverse science and engineering non-profits to reach and impact members of underrepresented populations to expose them to opportunities in high demand clean energy careers, including in:

Decarbonization

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⁷ For more information about the definition of different demographics categories and how the questions are framed see <u>USEER</u> Appendix B.

⁸ Unionization rates vary by state.



- Energy Efficiency in commercial and residential buildings
- Energy Storage
- Grid Integration
- Materials and Manufacturing
- Renewable Energy
- Vehicles & e-Mobility

Disclaimer and Important Notes

This RFI is not a funding opportunity; therefore, EERE is not accepting applications as part of this process. EERE may issue a FOA, prize, or other solicitation in the future based on or related to the content and responses to this RFI. There is no guarantee that DOE will issue a FOA, prize, or other solicitation as a result of this RFI. If EERE chooses to issue a FOA, prize, or other solicitation regarding this subject matter, responding to this RFI does not provide any advantage or disadvantage to potential applicants. Final details, including the anticipated award size, quantity, and timing of EERE funded programs are subject to Congressional appropriations and direction.

The government intends to use any information it obtains from this RFI for planning and strategy development and on a non-attribution basis; this RFI does not constitute a formal solicitation for proposals or abstracts. Responses to this notice will be treated as information only. EERE will review and consider all responses in its formulation of program strategies for the identified materials of interest that are the subject of this request. EERE will not provide reimbursement for costs incurred in responding to this RFI. Respondents are advised that EERE is under no obligation to acknowledge receipt of the information or to provide feedback with respect to any information submitted under this RFI. Responses to this RFI do not bind EERE to any further actions related to this topic.

Confidential Business Information

Pursuant to 10 CFR § 1004.11, any person submitting information believed to be confidential and exempt by law from public disclosure should submit via email two well-marked copies: one marked "confidential," that includes all the information believed to be confidential, and one marked "non-confidential" without information believed to be confidential. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Evaluation and Administration by Federal and Non-Federal Personnel

Federal employees are subject to the non-disclosure requirements of a criminal statute, the Trade Secrets Act, 18 USC § 1905. The government may seek the advice of qualified non-federal personnel. The government may also use non-federal personnel to conduct routine,

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nondiscretionary administrative activities. Submissions may be reviewed by support contractors and private consultants. By submitting responses, respondents consent to EERE's providing the information to non-federal parties, who must be subject to an appropriate obligation of confidentiality prior to their being given access.

Request for Information Questions

DOE is seeking information about approaches for inspiring interest in clean energy careers. The following questions pertain to DOE's target groups for the purposes of the RFI: diverse science and engineering non-profits that have programs for underserved communities and/or groups (students) underrepresented in STEM. In the questions below, these groups are referred to as "the target groups."

- 1. What can DOE do, directly or indirectly, to support the target groups?
- 2. What barriers exist for generating interest in clean energy-focused STEM careers among the target groups?
- 3. What types of organizations support (financially or in-kind) engagement with the target groups?
- 4. If your organization receives funding for its engagement with the target groups, what portion of funding is from the government—federal, state, or local—versus other sources, such as philanthropic or other community-based organizations?
- 5. Which types of funding source and mechanism (government or philanthropy; grant, cooperative agreement, prize, or contract) or other support do you find most effective and/or useful, and why?
- 6. Other than science and engineering non-profits, what kinds of organizations would be most effective as partners with DOE in inspiring interest in clean energy-focused STEM careers?
- 7. In your experience, what kinds of programming are most effective in inspiring interest in clean energy-focused STEM careers among the target groups?
- 8. Please suggest approaches/services other than student-focused programming to inspire interest in clean energy-focused STEM careers among the target groups.

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- 9. Concerning funding for planning and implementing a program to inspire interest in clean energy-focused STEM careers among the target groups,
 - a. What size audience could you deliver programming to at these maximum funding levels:

Up to \$150,000

Up to \$250,000

Up to \$350,000

- b. In what ways would the funding level impact your ability to maximize outreach and impact?
- c. What funding amount would be necessary to develop a plan?
- 10. How do you typically become aware of DOE funding opportunities and other forms of assistance? Which means of communication do you find most effective, and why?
- 11. Please include any other relevant information or data to foster DOE's understanding of best approaches for inspiring interest in clean energy-focused STEM careers among the target groups.

Request for Information Response Guidelines

Responses to this RFI must be submitted electronically to CECFA@ee.doe.gov no later than 5 p.m. ET on Friday, January 26, 2024. Responses must be provided as attachments to an email. To ensure message delivery, DOE recommends that respondents compress (i.e., zip) attachments with file sizes exceeding 25 MB. Responses must be provided as a Microsoft Word (.docx) email attachment of no more than 6 pages in length, 12-point font, 1-inch margins. DOE will only accept electronic responses.

Please identify your answers by responding to a specific question. Respondents may answer as many or as few questions as they wish.

EERE will not respond to individual submissions or publish publicly a compendium of responses. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed.

Respondents are requested to provide the following information at the start of their response to this RFI:

- Company / institution name
- Company / institution contact name
- Contact's address, phone number, and email address.

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