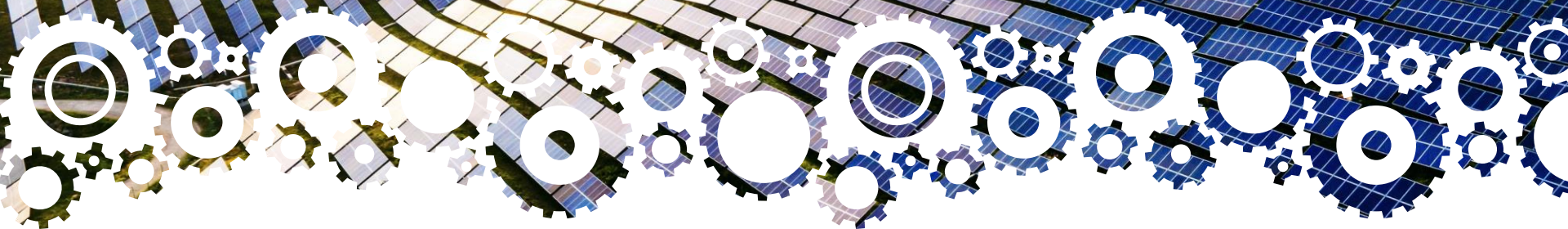




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Upskill Prize for the Solar Manufacturing Workforce Round 2 Informational Webinar

August 7, 2024

Topics

1 Welcome, Housekeeping, and Agenda

2 Overview of Prize, Goals, Timeline

3 Background of Prize

4 Prize Submission Requirements

5 HeroX Demo

6 Questions

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The American-Made program is your **fast track to the clean energy revolution**. Funded by the U.S. Department of Energy, we incentivize innovation through prizes, training, teaming, and mentoring, connecting the nation's entrepreneurs and innovators to America's national labs and the private sector.



Timeline and Prize Rounds: Round 2 Now Open

Timeline: Launched March 2024, with new rounds launching approximately every 4-6 months. Competitors can apply to, and win, multiple rounds.

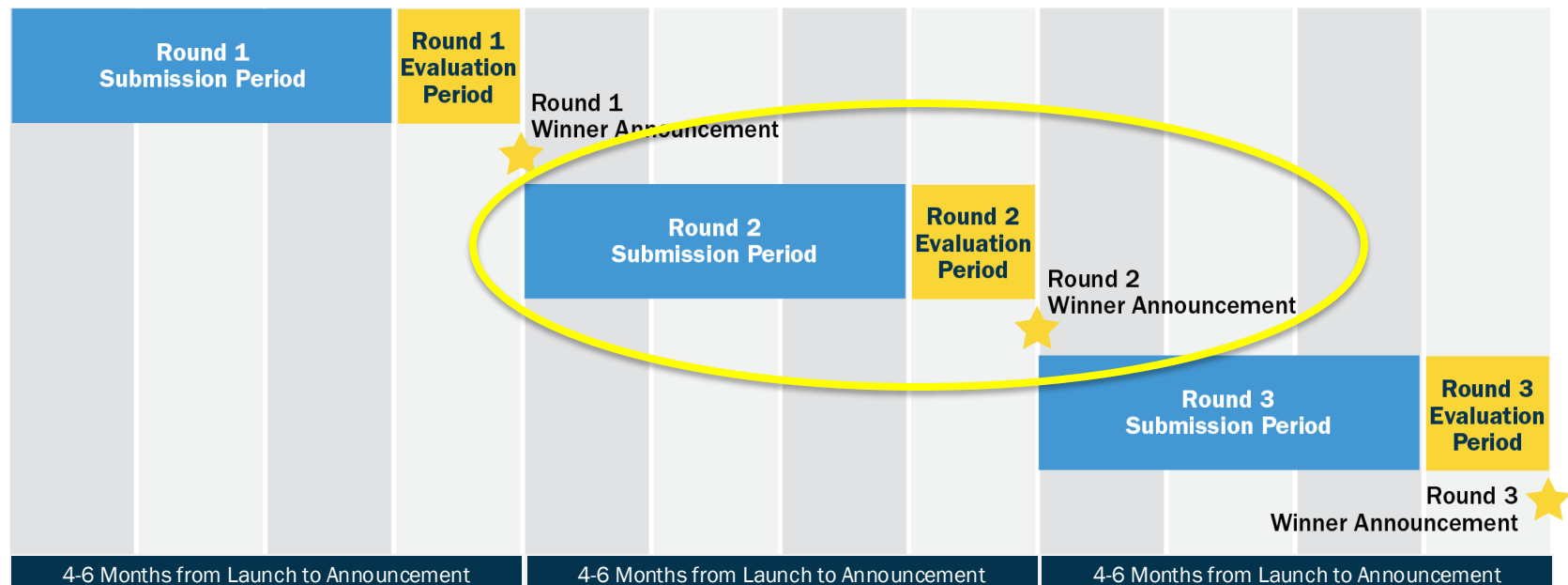


Figure 1: Anticipated Prize Round Timeline

Rules Update Released - July 2024



Official Rules
American-Made Upskill Prize
For the Solar Manufacturing Workforce
March 2024

We released a rules modification with several changes to the rules. See the Official Rules to review the modifications in full.

Throughout our webinar, we will highlight significant Round 2 modifications made to the rules in Yellow.

<https://americanmadechallenges.org/challenges/upskill-prize/docs/Upskill-Prize-Official-Rules.pdf>

Upskill Prize Overview

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The American-Made Upskill Prize



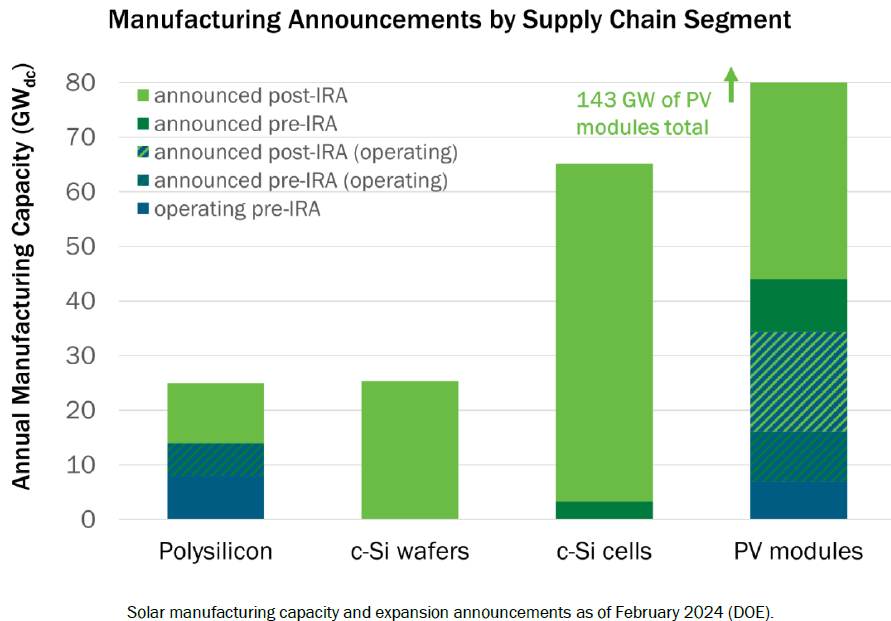
What: The American-Made Upskill Prize is single-phase \$5 million prize designed to **accelerate the expansion of the U.S. solar manufacturing workforce** and equip workers with the skills necessary to revitalize the domestic solar manufacturing supply chain. **This prize targets various facets of the U.S. solar photovoltaics (PV) module supply chain, addressing critical workforce needs.**

Who: The prize is open to **U.S.-Based PV Manufacturers and U.S.-Based Training Organizations** (such as: community colleges, trade schools, employment training centers, and unions.)

When: Launched in March 2024, with new rounds expected every 4-6 months. **Next Deadline (Round 2): Nov. 20, 2024.**

Prize Background

- **IRA Impact:** The IRA, signed in 2022, boosts American solar manufacturing with substantial investments.
- **Investment Surge:** Post-IRA, announcements show plans for 115 GW of module manufacturing and 210 GW for other PV segments, totaling \$16 billion.
- **Workforce Challenges:** Despite growth, the U.S. solar manufacturing workforce lacks trained labor, hindering industry expansion.
 - The U.S. PV supply chain in particular has workforce development needs not found in other industries (polysilicon, ingot, wafer, cell, module, and module components like glass).



Goals of the American-Made Upskill Prize

Prize Aim: The aim of the prize is to fill workforce gaps necessary to strengthen the U.S. solar module supply chain and attract new individuals to enter the clean energy workforce.

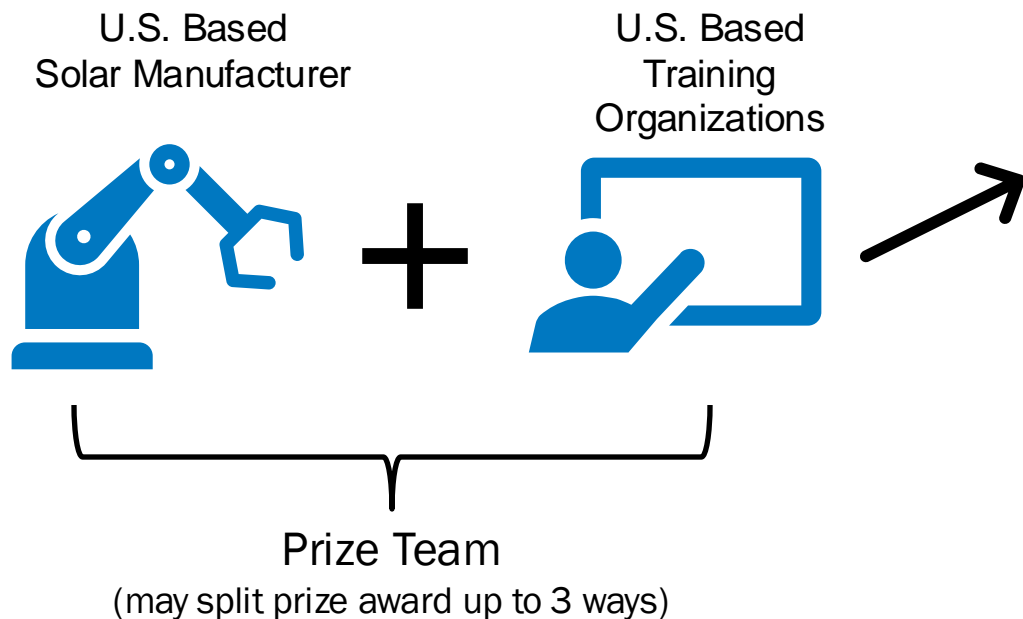
Partnership Focus: The prize encourages partnerships between manufacturers and training organizations to accelerate the growth and expansion of the U.S. solar module supply chain.

Community and Industry Impact: By addressing workforce challenges and opportunities, the prize aims to create family-sustaining careers, revitalize communities, and advance equity for historically underserved communities.



A Prize Competition Structured for Success

The Upskill Prize encourages U.S.-Based PV Manufacturers and U.S.-Based Training Organizations to partner and propose workforce training plans that address either or both new manufacturing worker training and/or incumbent manufacturing worker training.



Prize Submission

Incumbent Worker Training

Develop and propose plans to train incumbent manufacturing workers with new skills needed to support the growth of solar manufacturing.

and/or

New Worker Training

Develop and propose plans to train new manufacturing workers with the skills they need to be successful in the solar manufacturing industry, particularly at new or expanding manufacturing facilities.

Partnership Examples



A U.S.-based manufacturer, acting as team lead, is establishing a new solar cell facility and must hire and train operators. The manufacturer spearheads recruitment and collaborates with a U.S.-based community college, a team member, to train new hires in diverse skills for production. Both parties split the prize payment. The workers receive a certificate after completing the program.



A U.S.-based university, as team lead, offers a manufacturing or solar technology course, partnering with a U.S.-based manufacturer to upskill its employees. Prize payment is shared, with the university receiving the majority. The workers receive course credit after completing the program.



A U.S.-based manufacturer, as team lead, scales up its solar glass facility and collaborates with an employment training center to offer a new-hire certification program. Additionally, the manufacturer partners with the manufacturing equipment vendor to provide specialized equipment training for current employees. Prize payment is shared among all three organizations.

Eligibility

The competition is open to the following:

- Private entities (for-profits and nonprofits)
- Nonfederal government entities such as states, counties, tribes, and municipalities
- Academic institutions.

Participants are subject to the following requirements:

- All teams must be led by either a U.S.-based PV manufacturer or a U.S.-based training organization.
 - A **U.S.-based PV manufacturer** is a private entity incorporated in the United States that operates in the solar PV module supply chain.
 - A **U.S.-based training organization** is a public or private entity based in the United States that provides education and training opportunities to the current and future solar manufacturing workforce.
 - Examples include but are not limited to community colleges, trade schools, employment training centers, community-based organizations, and joint apprenticeship or labor-management committees.
- Teams may partner with **non-U.S.-based training organizations**; however, payment must be made to a U.S.-based PV manufacturer and/or U.S.-based training organization.
- Private entities must be incorporated in and maintain a place of business in the United States.
- A single organization may participate on multiple teams as long as the scope of each submission is distinct. For example, a manufacturing company with multiple facilities in different locations may participate on more than one team, or a training organization may support different teams, provided that the proposed training for each team is unique.

Eligible Technology

- Solar PV module supply chain, including all upstream components, like polysilicon, ingot, wafer, cell, and module, as well as glass and other module components.

Ineligible Technology

- Balance-of-systems manufacturers are not eligible for this prize.
- Product distributors whose operations do not include a manufacturing component are not eligible for this prize
- The proposed training supports workers specifically involved in manufacturing, not business and support activities (e.g., sales, human resources, facility construction).

Important Dates

Now!

- Follow the Upskill Prize on HeroX and start working

November 20 at 5 pm ET

- Deadline to submit an entry

January/February

- Anticipated Round 2 Winner Announcement



Round 3 Anticipated to Launch Early 2025

Submission Requirements

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Read the Rules



Official Rules
American-Made Upskill Prize
For the Solar Manufacturing Workforce
March 2024

Official Rules of the American-Made Upskill Prize are available online

We released a rules modification with several changes to the rules. See the Official Rules to review the modifications in full.

Throughout our webinar, we will point out/highlight the modifications made to the rules.

<https://americanmadechallenges.org/challenges/upskill-prize/docs/Upskill-Prize-Official-Rules.pdf>



Prize Steps

1. **Submission** – Teams develop comprehensive workforce training plans to train current workers and/or attract and train new workers in partnership with training organization(s). Teams complete their submission packages and submit them online before the submission deadline.
2. **Evaluation** – The prize administrator screens submissions for eligibility and completion and assigns subject-matter-expert reviewers to independently score the content of each submission. **Ensure that you review the rules for updated information.**
3. **Announcement** – After the winners are publicly announced, the prize administrator notifies them and requests the necessary information to distribute cash prizes.
4. **Resubmission** – Teams that were not selected as winners in a given application cycle may improve their submission package based on the feedback given and resubmit in a following cycle. Winning teams are allowed to apply again in a future round, but must answer question 5 in the Technical Narrative.

What to Submit

Submission Form on HeroX:

1. Team information (required; select elements will be made public)
2. A declaration of other funding or in-kind support for training that the manufacturer is currently receiving, which could be from state or local government programs or other grants or prizes (required; will not be made public)
3. Narrative (required; will not be made public)
4. Summary PowerPoint slide (required; will be made public)
5. Letters of commitment or support (required; will not be made public)
6. Supporting Documentation



American-Made Upskill Prize Submission

Project Title

Team Name
Lead Organization Team Members: Names, geographic locations, contact info, and LinkedIn [profiles](#)

Lead Organization URL

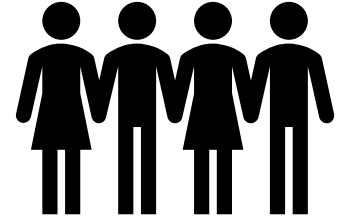
Lead Organization Address Location
City, state, and 9-digit zip code

Key Project Members
Key project partners and organizations (if any)
names, contacts, and links to their professional online profiles

Team Information

Please be prepared to provide the following in your submission. (Public items marked with *):

- Project title*
- Team name*
- Lead organization name*
- Organization address (street, city, state, and nine-digit zip code)
- Organization URL
- Short description of planned workforce training initiative*
- Team lead name
- Team lead email
- Team lead phone number
- Key project members (names, contacts, and links to their professional online profiles)
- Manufacturing facility information, including products, workforce size, facility location, etc.
- Training facility information, including locations, staff size, and past experience
- Other partners (if any)
- Requested funding from the prize (up to but not exceeding \$500,000)
- Description of how prize funding would be allocated to each partner organization, expressed as a percentage.



Technical Narrative: Four Questions

Word Limit: 3,000 words

1. MANUFACTURING FACILITY, JOB QUALITY, AND IMPACT

What type of manufacturing organization will be receiving/implementing the training, and what are the long-term workforce development needs for this organization?

2. SPECIFIC WORKFORCE TRAINING PLAN AND BUDGET

Describe the workforce training plan for which the team is requesting prize funding. Describe training partners, timeline, strategy, and budget.

3. WORKFORCE DEVELOPMENT STRATEGY

What is your holistic strategy for workforce development, and how does funding from the Upskill Prize fit into that strategy?

4. WORKFORCE DIVERSITY AND SUPPORT OF DISADVANTAGED COMMUNITIES

How does this training program support low-income and disadvantaged communities?

Narrative Content – All new, please review!

Question 2 – Specific Workforce Training Plan and Budget

Describe the workforce training plan for which the team is requesting prize funding.
Describe training partners, timeline, strategy, and budget.

Suggested content you provide:

- **Workforce Training Plan With Prize Support:** Describe the workforce training plan for which you are requesting funding, including the number and types of participating workers, training activities, and importance to the overall success of the manufacturing organization.
- In your description of prize-supported training activities, please specifically detail your plan to address either or both:
 - **New Worker Training:** Develop and propose plans to train new manufacturing workers with the skills they need to be successful in the solar manufacturing industry.
 - **Incumbent Worker Training:** Develop and propose plans to train incumbent manufacturing workers with new skills needed to support solar manufacturing.
- **Worker Recognition:** Describe by what means workers will receive tangible recognition upon completion of the proposed training, including but not limited to certificates, digital badges, or transcripts.
- **Training Partner:** Provide additional detail on the training partner(s) who will be supporting the training funded by this prize. Who will be providing the training, and what are their credentials? Is the proposed training curriculum already developed? If not, what is the plan and timeline to develop it?
- If the lead organization is not itself the training organization, a letter of commitment from the identified training organization(s) must be supplied. See Section 3.6.4: Letters of Commitment for more information.
- Please detail your plan to address either or both:
 - **New Worker Recruitment:** If proposing training for new workers, what is your plan for recruitment of new, interested individuals? What are your recruitment targets and timeline?
 - **Incumbent Worker Retention:** If proposing training for incumbent workers, what is your plan for retaining those workers, and how will the proposed training contribute to that retention plan?
- **Prize-Specific Budget:** How much prize funding are you requesting? Provide details on how the prize funds will be allocated and used. If necessary, describe what funding beyond the prize will be contributed by team members for the training activities.
- Funding allocation between team members should match that submitted as part of the Team Information (see Section 3.6.1: Team Information and Declaration of Funding).

Narrative Review - All new, please review!

Question 2 – Specific Workforce Training Plan and Budget

Describe the workforce training plan for which the team is requesting prize funding.

Describe training partners, timeline, strategy, and budget.

A single score on a scale of 1-6 is provided, taking the following statements into consideration:

- **Workforce Training Plan With Prize Support:** The submission clearly defines the training plan, including the number and types of participating workers, a detailed breakdown of training activities, their relevance to the identified workforce needs, how they contribute to the overall success of the organization and the worker recognition of completed training. The training plan supports workers specifically involved in manufacturing, not business and support activities (e.g., sales, human resources, facility construction).
- **Training Partner:** The submission details the qualifications and credentials of experienced training provider(s), highlighting their expertise in delivering effective training programs aligned with the manufacturing industry's needs. The training partner(s) either have curriculum and training materials prepared or have presented a plan for the development of training materials. The training partner(s) have demonstrated experience reaching the desired worker pool for training.
- If the lead organization is not itself the owner/operator of the manufacturing facility, a strong letter of commitment from the facility has been supplied.
- The submission outlines a clear and well-defined plan for recruiting and/or retaining individuals interested in the proposed training. It demonstrates a strategic approach to attracting suitable candidates from a diverse pool and/or retaining skilled workers from your current workforce.
- Clear and achievable recruitment and/or retention targets, and realistic timeline if recruiting new workers, are specified.
- **Prize-Specific Budget:** The submission provides a detailed breakdown of the planned budget for training activities, including a clear allocation of funds and description of use. The budget is realistic.
- A sufficient amount of the requested budget is allocated to the organization conducting the training and is consistent with the workforce training plan outlined; funds not directly used for training (e.g., recruitment) are sufficiently justified.

Technical Narrative: Add Fifth Question for Previous Winners

Word Limit: 4,000 words

Question 5 – Application From Previous Winner (i.e., for Competitors Who Have Already Won a Previous Upskill Prize), Additional 1000 Words

What was the impact of your previous training program, and how will an additional prize award impact your continued efforts?

Suggested content you provide

- Describe the impact of the training program funded with your prior Upskill-Prize-winning submission. How many people were trained, how many new training products were developed, and what impact have you seen in the manufacturing facility? Supporting documentation (see Section 3.6.5: Supporting Documentation) evidencing the success of this training is strongly encouraged.
 - Documentation could include training completion certificates/records, worker surveys or testimonials, worker participation and retention statistics, wage and promotion statistics, etc.
- Describe how your workforce training plan and approach, including training needs (e.g., if you are expanding operations and need to train more people), have evolved since the last time you submitted.
- Describe why you need additional funding to continue to make progress. What was not achieved the first time around? Are there additional people who need to be trained? Do you need additional training materials?
- Will the approach this time around be different than the first time around? What are you looking to achieve with additional funding?

A single score on a scale of 1–6 is provided, taking the following statements into consideration:

- The team achieved positive impact from the first round of the training award and has identified additional value to building on that success.
- The team identified a clear plan that will expand the workforce training program.
- The team documented the impact measured, the diversity achieved, and any new training products developed.

Tips for a Successful Application

- **Read the Rules** and make sure you are aware of the Round 2 modifications
- Clearly identify whether Prize-funded training will support incumbent or new workers; if it will support both, explain the differences in approach this may involve (e.g. recruitment and onboarding of new workers vs. retention of incumbent workers)
- Be specific about the training proposed through this prize. Include details like who is being trained, what are they being trained on, length of training, who is conducting the training, will the training be in-person, will employees be compensated during training, has your company previously offered this training, etc.
- Clearly explain how the specific training plan submitted for this Prize fits into the overall workforce development strategy of the manufacturer (link between questions 2 and 3)
- For question 4 of the narrative, make sure you explain how the specific proposed training – not your general company HR policies – supports workforce diversity and disadvantaged communities. Be specific!
- Be sure to include a detailed budget for training activities you are proposing (labor hours, materials allocation, etc.)
- Make it clear how the company is investing in their own workforce outside of this prize.

Summary Power Point slide (public)

Optional [Template now available](#) on HeroX.

Make a public-facing, one-slide submission summary that introduces your team and/or organization and your mission. 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-pt font.

This should be submitted as a PDF.



Letters of Commitment or Support

Team leads are required to obtain Letters of Commitment from each Team member:

- If the team lead is a U.S.-based manufacturer, then a Letter of Commitment from a training organization is required. U.S.-based manufacturers should partner with a training organization that they can work with to execute a comprehensive workforce training program that meets the needs of the manufacturing facility.
- If the team lead is a training organization, then a Letter of Commitment from a U.S.-based manufacturer is required. Training organizations should build a comprehensive workforce training program with a specific U.S.-based manufacturer as a key partner who is willing, able, and responsible for implementing the training program to expand and advance the diverse workforce needed in the manufacturing facility.

Additional letters of support (from financiers, community-based organizations, trade organizations, state and local governments, etc.) are optional.

Supporting Documentation

To support the narrative discussion (see [Section 3.6.2: Narrative](#)), competitors may upload a single PDF of additional supporting documentation (up to 15 pages).


Review Process





- The submissions will be scored by a panel of experts.
- Reviewers will score each section 1–6, depending on the degree to which the reviewer agrees that the submission reflects the statements for consideration.
- Each individual section 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.
- 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 of winning.
- 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


HeroX Demonstration


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Upskill Prize

for the Solar Manufacturing Workforce



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Upskill Prize for the Solar Manufacturing Workforce

Accelerating the expansion of US solar manufacturing workforce & building skills to revitalize domestic solar manufacturing supply chain.

Energy, Environment & Resources

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Stage:
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Prize:
\$5,000,000

SOLVE THIS CHALLENGE

Summary

Timeline

Forum

Teams 3

Entries

Resources

FAQ

Challenge Overview

Who Can Compete?

Important Dates

Guidelines

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29



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Get Support!

Upskill Prize Power Connectors



What is a Power Connector?

Power Connectors are organizations contracted yearly to perform a variety of tasks for specific prizes that advance program successes, providing assistance to teams, and extending the reach and improving the diversity and inclusivity of the American-Made Challenges overall.

ADL Ventures will be available to any competitors in the Upskill Prize with a focus on matchmaking and supporting the development of diverse workforce and quality jobs plans. They provide support with the following:

- Application Support
- Teaming/Matchmaking
- Recruiting
- General Questions

Contact ADL Ventures:

upskill@adlventures.com

Contacts can be found on HeroX under Resources, Guidelines, and the FAQ!

Important Dates

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Important Dates

Now!

- Follow the Upskill Prize on HeroX and start working

November 20 at 5 pm ET

- Deadline to submit an entry

January/February

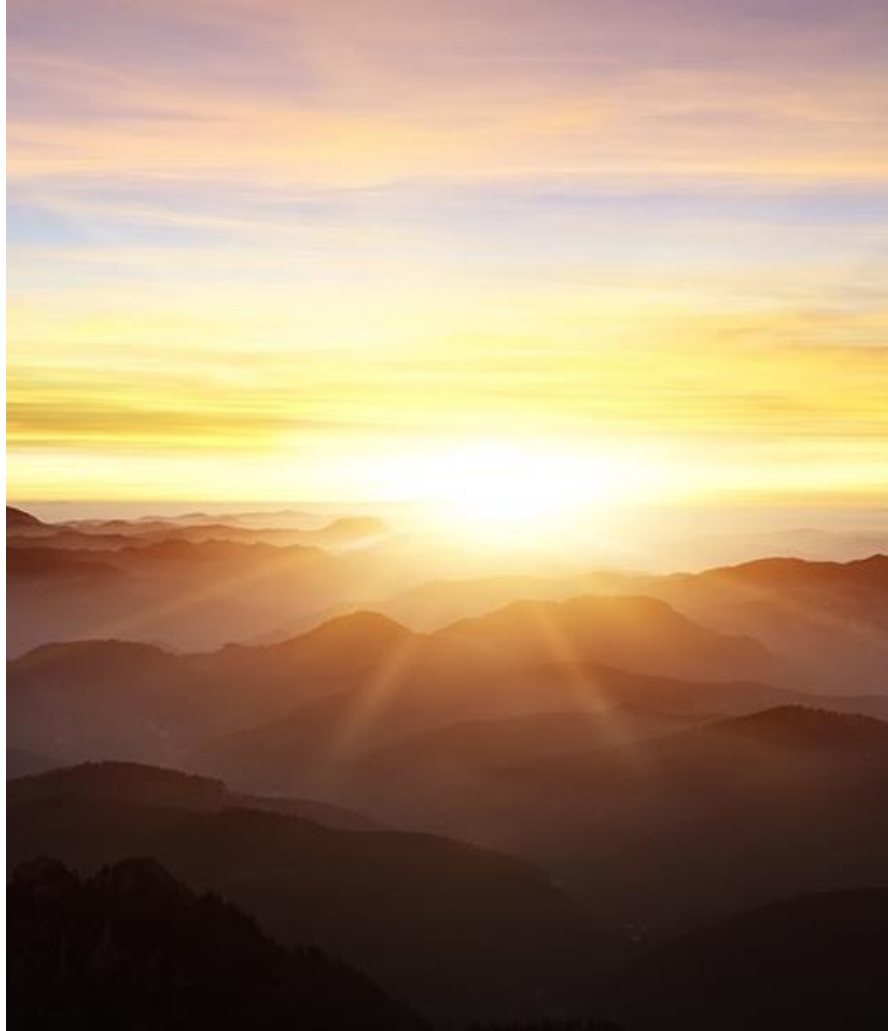
- Anticipated Round 2 Winner Announcement



Round 3 Anticipated to Launch Early 2025

Resources

1. Follow the challenges on HeroX:
<https://www.herox.com/upskillprize>
2. Rules:
<https://americanmadechallenges.org/challenges/upskill-prize/docs/Upskill-Prize-Official-Rules.pdf>
3. Send Questions:
upskill.prize@nrel.gov
4. Get Support from ADL Ventures:
5. Start Working!
6. Submit by November 20.



Questions and Answers

Email: Upskill.Prize@nrel.gov

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