



U.S. DEPARTMENT OF ENERGY

## Official Rules

# American-Made Solar Prize Round 5

## Hardware Track

The American-Made Solar Prize Round 5 Hardware Track is designed to accelerate and sustain American solar innovation through a series of contests, leveraging a diverse and powerful support network of national laboratories, energy incubators, and other resources across the United States.

## These rules are effective June 10, 2021, for Round 5 of the Solar Prize Hardware Track

Note: These rules are different from the rules for previous Solar Prize rounds. Round 5 has two tracks that focus separately on hardware and software components. Each track (Hardware and Software) has its own rules document. Please read these rules to ensure you have the most up-to-date information and are applying to the correct program.

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# I. PROGRAM SUMMARY

## 1. INTRODUCTION

The American-Made Solar Prize is a prize competition designed to energize U.S. solar innovation through a series of contests and the development of a diverse and powerful support network that leverages national laboratories, energy incubators, and other resources across the country.

Rounds 1 through 4 of the Solar Prize focused on solar manufacturing and hardware components. Solar Prize Round 5 is structured with two tracks that focus separately on hardware and software components to allow more entrepreneurs to compete in the solar innovation space. These rules are specifically for the American-Made Solar Prize Round 5 Hardware Track. Any innovation that is focused solely on hardware or has a hardware component is eligible for the Solar Prize Hardware Track. Innovations focused solely on software are eligible for the [Solar Prize Software Track](#).

Building a clean energy economy and addressing the climate crisis is a top priority of the Biden Administration. This prize will advance the Biden Administration's goals to achieve carbon pollution-free electricity by 2035, "deliver an equitable, clean energy future, and put the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050"<sup>1</sup> to the benefit of all Americans. The U.S. Department of Energy (DOE) is committed to pushing the frontiers of science and engineering, catalyzing clean energy jobs through research, development, demonstration, and deployment, and ensuring environmental justice and the inclusion of disadvantaged communities.

The activities incentivized by this prize support the government-wide approach to the climate crisis by driving innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. Specifically, DOE's [Solar Energy Technologies Office](#) (SETO) is launching Round 5 of the American-Made Solar Prize, a part of the American-Made Challenges, to energize U.S. solar manufacturing. This program consists of two parallel and integrated features: the Ready!, Set!, and Go! Contests, and the American-Made Network.

Competitors in the Ready!, Set!, and Go! Contests participate in escalating challenges. The contests provide up to \$3 million in cash prizes and other benefits. They incentivize driving innovations from idea to pilot testing in less than one year on an accelerated schedule.

The American-Made Network supports competitors' efforts by connecting them with DOE's national laboratories, including their world-class research facilities and experts, as well as private-sector stakeholders who are already actively assisting entrepreneurs to bring innovative ideas and concepts to market. This community includes incubators, investors, philanthropists, fabrication facilities, and seasoned industry leaders, all of whom will provide technical insight, business development expertise, product validation, and other support throughout the competition. These diverse entities are labeled "Connectors" and make up the key components of the Network.

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<sup>1</sup> Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad" (Jan. 27, 2021).

The three contests and the American-Made Network bring connections, resources, and funding to competitors as they advance their innovations, accelerating their cycles of learning from years to months. The program energizes innovation in U.S. solar technology manufacturing and reassert the country's global leadership in next-generation technologies.

## 2. BACKGROUND

New energy technologies have begun to reshape the national and global energy landscape. Advanced electrification, digitization, and deployment of grid-connected distributed energy assets are changing the energy industry. The United States has been at the forefront in this transformation, and as technologies, markets, service, and capital providers have evolved over the past decade, there is a reinvigorated entrepreneurial interest across all facets of the nation's energy system.

However, domestic manufacturing of solar technologies has continued to decline, impeding innovations that have been created in America from being produced in America. This decline has negatively impacted job and economic benefits created by these innovations, while weakening domestic supply chain infrastructure, competitiveness, and national security. U.S.-led energy research and development efforts continue to identify and lay the groundwork for exploring many of the most advanced energy technologies in the world. New and existing efforts that create and support advanced manufacturing solutions must now come together, re-establishing U.S. manufacturing leadership to drive down costs and ensure that the nation leads the world in energy production and innovation.

The American-Made Solar Prize Hardware Track is designed to meet this challenge.

The American-Made Solar Prize Hardware Track, also referred to as the Hardware Track, spurs innovation and addresses tough problems facing the solar energy sector broadly and technology manufacturing specifically. Spearheaded by SETO within the Office of Energy Efficiency and Renewable Energy (EERE) and in partnership with the [National Renewable Energy Laboratory \(NREL\)](#), the Hardware Track is a series of three progressive competitions that incentivize the nation's innovators and entrepreneurs to rapidly discover, research, iterate, and deliver new solutions to market, with the goal of expanding solar manufacturing in the United States. This scalable approach to rapid product development not only provides cash prizes but also engages America's energy incubators, investors, universities, 17 national laboratories, and others to help participants achieve their goals.

The Solar Prize Hardware Track utilizes a new program structure designed to strengthen and scale critical connections that accelerate and sustain American innovation through two intertwined components: prize competitions and the American-Made Network. The unique American-Made Network takes a structured approach to bring diverse sources of support, such as DOE's national laboratories, business incubators, and prototype fabrication facilities, together under one umbrella. This approach is designed to be flexible, scalable, and extend beyond solar to other technology domains and sectors.

Instead of investing in one-of-a-kind solutions or scaling “safe-bet” approaches with dated technologies, the Solar Prize Hardware Track applies a resource-multiplying approach that not only invests in multiple new innovations but also creates a foundation for expanding support for future manufacturing growth. This simultaneously enables the rapid development of technology and strengthens critical connections for commercialization.

While global competitors spend their resources scaling legacy technology, this program develops next-generation commercially viable solutions, planting the seeds for a U.S. manufacturing renaissance.

The program makes it faster and easier for our nation to transform innovative research and ideas into early-stage concepts and then build prototypes ready for validation. As competitors work to win cash prizes and other benefits, they are connected with mentoring, training, and other services from the American-Made Network, resulting in the long-term success of participants and U.S. manufacturing.

Currently, the solar industry and its associated research community does not match the diversity of the United States. Women and minorities are underrepresented in the solar industry and in the science, technology, engineering, and math (STEM) fields. STEM fields also lack diversity in geographical origin, with U.S. rural areas underrepresented relative to large population centers. Since STEM students and graduates support R&D activities, which can often result in the formation of companies, the lack of diversity in that pipeline adversely affects the opportunities and potential outcomes in scientific and economic output. To achieve the administration’s energy justice goals, SETO is striving to ensure that the work it funds supports more equitable participation in the solar energy community. SETO recognizes the inherent advantages of diverse teams and encourages competitors to consider diversity and inclusion when developing their teams.

### 3. CONTESTS: READY! – SET! – GO!

The Ready!, Set!, and Go! Contests fast-track efforts to identify, develop, and test disruptive solutions to meet solar industry needs. Each stage includes a contest period when participants work to rapidly advance their solutions. DOE invites anyone, individually or as a team, to compete to transform a conceptual solution into an impactful product and business. This prize specifically seeks hardware solutions or solutions with a hardware component. Competitors developing an innovation solely focused on software should apply to the [American-Made Solar Prize Software Track](#), which runs in parallel with the Hardware Track.

#### **The Three Contests:**

1. **Ready! Contest** – Competitors demonstrate that they have identified and taken action to develop an impactful idea or solution that addresses a critical need in the solar industry. They also propose a path to develop a proof of concept. Winners receive \$50,000 in cash and are eligible to compete in the Set! Contest. Any eligible person, team, or business can submit a package to compete in the Ready! Contest, although individuals must form a business if they advance to the Set! Contest. A panel of expert reviewers from industry,

national laboratories, and government evaluate submissions. DOE selects the winners (semifinalists), based on reviewer input and the impact the new hardware solutions may have on the solar industry.

2. **Set! Contest** – Semifinalists work to substantially advance their technology solution toward a viable and promising proof of concept. They must show that their proof of concept solves an important problem in the solar industry and that it will also have a significant demand when the concept enters the market. Competitors are expected to make significant progress toward developing a mechanism that can validate and pilot test their solution. The semifinalists are evaluated by a panel of reviewers during a national demonstration day event where competitors present their hardware solutions. The selected finalists receive \$100,000 in cash and \$75,000 in vouchers that may be redeemed at national laboratories and qualified fabrication facilities to further develop their solution. They are then eligible to compete in the Go! Contest.
  
3. **Go! Contest** – Finalists work to substantially advance their solution from proof of concept to a refined prototype and find a partner to perform a pilot test of the prototype solution. They are evaluated by a panel of reviewers during a national demo day event, and DOE selects two winners. Each winner receives \$500,000 in cash and an additional \$75,000 in vouchers redeemable at national laboratories and qualified fabrication facilities.

The three contests offer a total of \$3 million in cash prizes and \$900,000 in vouchers.

Contest Funding:

Contest	Winners	Prize
1. Ready!	Up to 20	\$50,000 in cash
2. Set!	Up to 10	\$100,000 in cash and \$75,000 in vouchers
3. Go!	2	\$500,000 in cash and \$75,000 in vouchers

To learn more and sign up, go to <http://www.herox.com/solarprizeR5hardware>.

## 4. AMERICAN-MADE NETWORK

The American-Made Network cultivates resources and builds connections that enhance, accelerate, and amplify competitors’ efforts. The objective is to link participants with the people, resources, financing, perspectives, and industry expertise necessary for long-term success.

The network is comprised of the following elements:

1. **Prize and Network Administrator (NREL):** DOE has partnered with NREL to administer the Solar Prize Hardware Track. NREL, as the administrator, helps competitors locate and leverage

the vast array of national laboratory resources. NREL also connects elements of the Network with the competitors, as described below.

2. **Vouchers:** Winners of the Set! and Go! Contests receive vouchers they may use to fund work at national laboratories and other facilities to accelerate the production, improvement, or validation of their prototypes. Entities interested in helping competitors through the voucher program can visit the following site for details:

<https://americanmadechallenges.org/solarprize/connect.html#vouchers>.

3. **Connectors:** Connectors are entities capable of identifying and recruiting contest participants, as well as supporting competitors on their innovation journey. Connectors can be incubators, universities, think tanks, industry groups, or any enabler seeking to help competitors win by performing support activities such as:

- Attracting a diverse range of talented individuals to become contest competitors
- Helping competitors refine their innovations, develop business plans, work with mentors, and connect with investors and industry partners
- Raising nonfederal funding to support this program and its participants
- Providing in-kind resources, tools, and facilities to accelerate competitors' abilities to innovate, test, and refine their solutions while reducing technology and business risks
- Connecting competitors to regional prototyping and manufacturing expertise, facilities, and experts.

Connectors that support participants who win the Ready! or compete in the Set! or Go! Contests are financially rewarded based on the table below.

#### Connector Recognition Reward Opportunities:

Recognition Reward Name	Anticipated Number of Awards	Dollar Amounts	Details*
<b>Mobilize</b>	Up to 1 per winning Ready! competitor (20 competitors)	\$5,000 per competitor	Distributed to Connectors who recruit and/or support competitors who go on to win the Ready! Contest.
<b>Set! Mentor</b>	Up to 1 per winning Set! Competitor (10 competitors)	\$7,500 per competitor	Can be divided among <b>up to 3</b> Connectors identified as significant supporters by Set! Contest winners.
	Up to 1 per non-winning Set! competitor (10 competitors)	\$2,500 per competitor	Can be divided among <b>up to 3</b> Connectors identified as significant supporters by competitors who competed in but did not win the Set! Contest.



<b>Go! Mentor</b>	Up to 1 per winning Go! competitor (2 competitors)	\$10,000 per competitor	Can be divided among <b>up to 3</b> Connectors identified as significant supporters by Go! Contest winners.
	Up to 1 per non-winning Go! competitor (8 competitors)	\$5,000 per competitor	Can be divided among <b>up to 3</b> Connectors identified as significant supporters by competitors who competed in but did not win the Go! Contest.
* Power Connectors and national labs are ineligible to receive Recognition Rewards.			

Competitors and reviewers in any given round cannot also be a Connector for that round. If a Connector formally joins a team, they forego any financial incentive and recognition payment for that round.<sup>2</sup>

Entities interested in participating as Connectors can visit the following site for details: <https://network.americanmadechallenges.org/>.

4. **Power Connectors:** Power Connectors are Connectors who play a more substantial role in the competition and receive funds to expand and amplify DOE and NREL’s efforts. Power Connectors operate under a contract with NREL and may be selected to host a national demo day. These stakeholders work to identify and support participants in the Ready!, Set!, and Go! Contests, and they also partner with NREL to envision and execute a long-term sustainable strategy for scaling the American-Made Challenges program. Power Connectors are ineligible for all Recognition Rewards. Power Connectors are rewarded for efforts that:

- Increase the number of new, high-quality competitors
- Expand the network of partners, resources, and tools
- Increase the diversity of funding sources for competitors and the program
- Produce engaging and well-attended national demo day showcases
- Expand the number of manufacturing and technological challenges addressable by the program
- Provide leadership and support within the increasingly robust American-Made Network

Entities interested in becoming Power Connectors can visit the following site for details: <https://network.americanmadechallenges.org/>.

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<sup>2</sup> Additional details can be found in the [Guidelines for Connector Recognition Rewards](#).

## 5. IMPORTANT DATES

These rules are applicable to the Solar Prize Hardware Track. Please visit <http://americanmadechallenges.org/solarprize.html> and select the relevant round to view the key dates for each round of the Prize.

## 6. ELIGIBILITY REQUIREMENTS

Competitors in the Hardware Track must comply with the eligibility requirements below. By uploading a submission package, a competitor certifies that it is in compliance with these eligibility requirements. Eligibility is subject to verification before prizes are awarded. As soon as the prize administrator becomes aware that a competitor is not eligible to win the Ready!, Set!, or Go! Contest, the competitor may be disqualified. The registered competitor is the individual or entity that registers in HeroX to compete.

In keeping with the goal of growing a community of innovators, competitors are encouraged to form diverse, 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.

### Ready! Contest Eligibility

- Individuals, teams of individuals, private entities (for-profits and nonprofits), and nonfederal government entities (such as states, counties, tribes, municipalities, and academic institutions) are eligible to compete in the Ready! Contest.
- 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.

### Set! Contest Eligibility

- Only winners of the Ready! Contest are eligible to compete in the Set! Contest.<sup>3</sup>
- Competitors must be a for-profit business entity, such as a corporation or other organization that is formed in and maintains a primary place of business in the United States with majority domestic ownership and control.<sup>4</sup> A for-profit business entity is eligible to compete only if it includes a winner of the Ready! Contest as an employee or owner. Individuals or groups of individuals are not eligible to compete.

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<sup>3</sup> For purposes of this requirement, winners are defined as the key project members listed on the cover page of the team's winning Ready! submission package.

<sup>4</sup> EERE will consider issuing a waiver of the domestic ownership and control eligibility requirement. See [Appendix 2](#) for details.

- At least one representative from a competitor organization must participate in the competition demo day. The Set! Demo Day will be a virtual event.

### **Go! Contest Eligibility**

- Only the winning for-profit business entities of the Set! Contest are eligible to compete in the Go! Contest.
- Competitors must be a for-profit business entity, such as a corporation or other organization that is formed in and maintains a primary place of business in the United States with majority domestic ownership and control.<sup>5</sup> Individuals or groups of individuals are not eligible to compete.
- A committed pilot test partner must be part of the submission package, as evidenced by the inclusion of a legally binding commitment in the submission package. The legally binding commitment must be from an entity that is not represented by a team member on the submission package. DOE and NREL will not provide a preliminary review. Teams should submit the strongest possible documentation to meet this requirement, such as a signed contract, purchase order, or a signed letter from a pilot partner with a guaranteed commitment to pilot test. The legally binding commitment must be free of contingencies, except it may be contingent on the competitor winning the Go! Contest. Letters indicating general support, future interest, and other contingencies on conducting a pilot test; memorandums of understanding (MOUs); and unsigned agreements are unlikely to meet this requirement. A team will not be eligible to win the Go! Contest if this requirement is deemed unfulfilled.
- At least one representative from a competitor organization must participate in the Go! Demo Day. The Go! Demo Day may be an in-person event; competitors must be willing to be flexible with potential travel. The Prize Administrator informs all competitors about Demo Day details as soon as information becomes available to ensure there is plenty of time to make travel arrangements.

### **All Contests Eligibility**

- Individuals, private entities (for-profits and nonprofits), and nonfederal government entities (such as states, counties, tribes, municipalities, and academic institutions) are subject to the following requirements:
  - An individual prize competitor (who is not competing as a member of a group) must be a U.S. citizen or a 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 a permanent resident. Individuals competing as part of a team may participate if they are legally authorized to work in the United States.

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<sup>5</sup> EERE will consider issuing a waiver of the domestic ownership and control eligibility requirement. See [Appendix 2](#) for details.

- Private entities must be incorporated in and maintain a primary place of business in the United States with majority domestic ownership and control.
  - If an entity seeking to compete does not have majority domestic ownership and control, EERE may consider issuing a waiver of that eligibility requirement where (1) the entity submits a compelling justification; (2) the entity is incorporated in and maintains a primary place of business in the United States; and (3) the entity otherwise meets the eligibility requirements. EERE may require additional information before making a determination on the waiver request. There are no rights to appeal DOE's decision on the waiver request. See [Appendix 2](#) for more information on the waiver process.
- Academic institutions must be based in the United States.
- Non-DOE federal entities and federal employees are not eligible to win any prize contests in this program.
- Employees of an organization that co-sponsors this program with DOE are not eligible to participate in any prize contests in this program.
- Individuals who worked at DOE (federal employees or support service contractors) within six months prior to the submission deadline of any contest are not eligible to participate in any prize contests in this program. Additionally, members of their immediate families (i.e., spouses, children, siblings, or parents) and anyone who lives in their household, regardless of relation, are not eligible to participate in the Prize.
- NREL employees directly involved in administration of this prize are not eligible to participate in any prize contest in this program; however, NREL and other national laboratory employees, including lab researchers, may compete and win a prize contest in this competition, provided they are not competing in their official capacity.
- 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.
- Entities identified by the Department of Homeland Security (DHS), Binding Operational Directives (BOD) as an entity publicly banned from doing business with the United States government are not eligible to compete. See <https://cyber.dhs.gov/directives/>.
- Entities and individuals identified as a restricted party on one or more screening lists of Department of Commerce, State, and the Treasury are not eligible to compete. See the Consolidated Screening List: <https://www.trade.gov/consolidated-screening-list>.

- This prize competition is expected to positively impact U.S. economic competitiveness. Participation in a foreign government talent recruitment program<sup>6</sup> could conflict with this objective by resulting in unauthorized transfer of scientific and technical information to foreign government entities. Therefore, individuals participating in foreign government talent recruitment programs of foreign countries of risk are not eligible to compete. Further, teams that include individuals participating in foreign government talent recruitment programs of foreign countries of risk<sup>7</sup> are not eligible to compete.
- As part of your submission to this prize program, you will be required to sign the following statement:
  - I am providing this submission package as part of my participation in this prize. I understand that in providing this submission to the Federal Government, I certify under penalty of perjury that the named competitor meets the eligibility requirements for this prize competition and complies with all other rules contained in the Official Rules document. I further represent that the information contained in the submission is true and contains no misrepresentations. I understand false statements or misrepresentations to the Federal Government may result in civil and/or criminal penalties under 18 U.S.C. § 1001 and § 287.

## 7. PROGRAM GOAL REQUIREMENTS

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

- The proposed solution is related to the solar power industry.
- The proposed solution includes a hardware component. Solutions that are solely software or a business model innovation without being part of a hardware package are discouraged.

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<sup>6</sup> A foreign government talent recruitment program is defined as an effort directly or indirectly organized, managed, or funded by a foreign government to recruit science and technology professionals or students (regardless of citizenship or national origin, and whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to physically relocate to the foreign state for the above purpose. Some programs allow for or encourage continued employment at U.S. research facilities or receipt of federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to U.S. entities. Compensation could take many forms, including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.

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

- The majority of activities that are described in and support the submission package are performed in the United States and have the potential to benefit the U.S. solar market.
- The proposed solution represents an innovation that will move the industry beyond its current state.
- The proposed solution is not dependent on new, pending, or proposed federal, state, or local government legislation, resolutions, appropriations, measures, or policies.
- The proposed solution does not involve the lobbying of any federal, state, or local government office.
- The proposed solution is based on fundamental technical principles and is consistent with a basic understanding of the U.S. market economy.
- The submission content sufficiently confirms the competitor's intent to commercialize early-stage technology and establish a viable U.S.-based business in the near future with revenues that do not solely depend on licensing fees of intellectual property.

## 8. FIND HELP

Visit <https://americanmadechallenges.org/network.html> to review and contact the members of the American-Made Network who have signed up to help you succeed.

## 9. ADDITIONAL REQUIREMENTS

Please read and comply with additional requirements in [Appendix 1](#).

**COMPETITORS WHO DO NOT COMPLY WITH THESE REQUIREMENTS MAY BE DISQUALIFIED.**

## II. READY! CONTEST RULES

### 1. INTRODUCTION

The American-Made Solar Prize Hardware Track is a three-contest series with up to \$3 million in cash prizes. It is designed to accelerate and sustain solar innovation by supporting entrepreneurs as they develop transformative technology ideas into concepts and then into early-stage prototypes ready for industry testing. It is the first step to set American entrepreneurs on a pathway of accelerated innovation, so ideas can become products in months, not years. The Ready!, Set!, and Go! Contests are structured to provide the resources and environment necessary to create new solution concepts and develop them into early-stage prototypes in rapid learning cycles.

#### Ready! Contest Prizes

- Up to 20 semifinalists
- \$1 million in total cash prizes. Each semifinalist receives a cash prize of \$50,000.

The Ready! Contest is the first in this three-contest series with a total of \$1 million in cash prizes. Anyone meeting the eligibility requirements can compete in the Ready! Contest, but only winners of this contest (referred to as Ready! Contest winners or Solar Prize Hardware Track semifinalists) can compete in the subsequent Set! Contest. **The following rules are for competitors in the Hardware Track Ready! Contest. “You” and “your” reference competitors in the contest.**

### 2. GOAL

Rapidly transform an important problem from a conceptual solution to a plan for building a proof of concept.

### 3. PRIZES TO WIN

The Ready! Contest offers up to 20 cash prizes of \$50,000.

### 4. HOW TO ENTER

Complete a submission package online at <http://www.herox.com/solarprizeR5hardware> before the contest closing date.

### 5. READY! CONTEST PROCESS

The Ready! Contest consists of three steps:

1. **Preparation, Activation, and Submission** – Competitors identify and take action on a critical need in the solar industry, develop a transformative solution pathway, and make a plan to build a proof of concept for this solution. One-person teams can compete, but building a diverse, multidisciplinary team may help strengthen capabilities and team competencies. Competitors can also engage the American-Made Network to gain help and support, leveraging the potential for

recognition payments to the helping entities.<sup>8</sup> Competitors complete their submission packages and submit online before the Ready! Contest closes.

2. **Assessment** – The Prize Administrator screens submissions for eligibility and completion and assigns subject-matter expert reviewers to independently score the content of each submission. The judging criteria assess the following competitor activities.
  - **Problem-Solution Fit:** Develop a credible solution concept to a real-world problem facing the solar industry. Perform substantive due diligence to gather feedback and validate that the proposed solution addresses a real problem and is technically feasible.
  - **Team Capabilities:** Form an exceptional and committed team to accomplish the stated goals of the proposed solution.
  - **Network Engagement:** Cultivate relationships with members of the American-Made Network and/or other entities to maximize the likelihood of creating a viable business based on the proposed solution and enhance the quality of the submission package. The Network is there to help you succeed, and they are rewarded for assisting you, so do not hesitate to engage them to help make your solution better.
3. **Announcement** – After the semifinalists are publicly announced, the Prize Administrator notifies them and requests the necessary information to distribute cash prizes. After winning the Ready! Contest, semifinalists develop their solutions in accordance with their plan to compete in the Set! Contest.

## 6. WHAT TO SUBMIT

A complete submission package for the Ready! Contest should include the following items:

Item	Content
Submission Package	<ul style="list-style-type: none"> <li>• 90-second video (public)</li> <li>• Cover page content</li> <li>• Narrative that answers four questions about the <i>problem, solution, team, and plan</i> (not to exceed 2,500 words)</li> <li>• One summary PowerPoint slide (public)</li> <li>• Technical assistance request (public)</li> <li>• Letters of commitment or support (optional).</li> </ul>

**Note:** Portions of the submission package are made available to the public. These have been denoted as such, and DOE does not intend to release the remaining parts of the submission to the public. See [Appendix 1](#) for additional details.

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<sup>8</sup> The Prize Administrator has dedicated approximately \$260,000 to recognize members of the American-Made Network that help competitors advance through the contests.



## All documents must be uploaded as a PDF.

Reviewers and the prize judge will evaluate your submissions by agreeing or disagreeing with assigned statements on a 1–6 scale, as shown below. These statements are the criteria.

1	2	3	4	5	6
strongly disagree	disagree	slightly disagree	slightly agree	agree	strongly agree

Online public video What is your innovation in 90 seconds?	
<b>Suggested content you provide</b> <ul style="list-style-type: none"><li>• The real-world problem you are solving</li><li>• Your solution and why it is transformational</li><li>• Who you are and why you have a competitive edge.</li></ul>	<b>Each statement is scored on a 1–6 scale</b> <ul style="list-style-type: none"><li>• The video explains a compelling real-world problem.</li><li>• The video describes a unique innovation that is implementable within the next five years.</li><li>• The video shows a knowledgeable and skillful team.</li></ul>

Post your publicly accessible video online (e.g., YouTube, Vimeo). Be creative and produce a video that conveys the required information in exciting and interesting ways, but do not focus on time-consuming activities that only improve production values (i.e., technical elements such as décor, lighting, and cinematic techniques). Assistance from others with experience in this area may be helpful. Members of the American-Made Network may be able to help you create your video.

Cover Page List basic information about your submission <i>Template</i> <sup>9</sup> : <a href="https://www.herox.com/solarprizeR5hardware/resources">https://www.herox.com/solarprizeR5hardware/resources</a>
<ul style="list-style-type: none"><li>• Project name</li><li>• Innovation tagline (e.g., your mission in a few words)</li><li>• Link to your 90-second video online</li><li>• Key project members (names, contacts, and links to their LinkedIn profiles)</li><li>• Keywords that best describe your solution (e.g., perovskite deposition, microinverters)</li><li>• Your city, state, and nine-digit zip code</li><li>• The partner(s), affiliate(s), and Connector(s)<sup>10</sup> that significantly helped you<sup>11</sup> advance your solution and the major items they helped with (if applicable).</li></ul>

<sup>9</sup> Use of the template is optional; however, all components listed here must be included in your document if you chose to create your own.

<sup>10</sup> See description of Connector in [I. Program Summary](#).

<sup>11</sup> Remember that you can incentivize Connectors help by agreeing to identify them here to receive a cash reward for that help if you win the Ready! competition. See the description of Recognition Rewards in [I. Program Summary](#) and the [Connector Guidelines](#) for details.

You should answer each of the following four questions. The content bullets are only suggestions to guide your responses. You decide where to focus your answers. The individual answers to the four questions do not have a word limit; however, **the aggregate response to these four questions must not exceed 2,500 words**, not including captions, figures/graphs, or references. A word count must be included at the end of your submission (see template for details). You may also include **up to five supporting images, figures, or graphs**. The reviewers will score the questions based on the content you have provided.

<b>Narrative</b> <b>Max 2,500 Words and 5 Supporting Images or Figures (PDF)</b> <b>Template<sup>12</sup>: <a href="https://www.herox.com/solarprizeR5hardware/resources">https://www.herox.com/solarprizeR5hardware/resources</a></b>	
<b>Question 1: <i>Problem</i></b> – What is the problem, and why is solving it important?	
<p style="text-align: center;"><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>Describe the problem, quantify its significance with metrics, and explain why now is the right time to solve it. Be specific to the problem space that your innovation addresses.<sup>13</sup></li> <li>Explain why existing solutions are inadequate. Be as technically specific as possible to your innovation area, providing examples where possible.</li> <li>Show how you know this is a significant problem using evidence-based validation (e.g., interviews with users, case studies, literature).</li> </ul>	<p style="text-align: center;"><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>The competitor quantifies a critical problem using important metrics and a compelling analysis of why now is the right time to address it.</li> <li>The competitor’s assessment of current solutions and their limitations shows a comprehensive understanding of the problem-solution space.</li> <li>The competitor uses real-world evidence to validate key assumptions about the industry need.</li> </ul>
<b>Question 2: <i>Solution</i></b> – What is your solution, and why will it be successful?	
<p style="text-align: center;"><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>Describe how your solution is better than the existing products or emerging solutions described in Question 1.</li> <li>Describe your innovation in as much detail as possible.</li> </ul>	<p style="text-align: center;"><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>Sufficient technical detail was provided to understand the underlying principles of operation of the innovation.</li> <li>The solution represents an innovative approach built on reasonable assumptions, valid technical foundations, and lessons</li> </ul>

<sup>12</sup> Use of the template is optional; however, all components listed here must be included in your document if you chose to create your own.

<sup>13</sup> Avoid providing general background on the rapid growth of the solar industry or other high-level trends the reviewers are well versed in.

<ul style="list-style-type: none"> <li>• Describe how your technical innovation compares against the current state of the art or commercially relevant competition.</li> <li>• Describe your innovation’s unique value proposition and how it will lead to a sustainable business with paying customers.</li> <li>• Define the proof of concept you will produce by the Set! Demo Day and explain what critical failures would cause you to reconsider your approach.</li> </ul>	<p>learned from other notable efforts in this space.</p> <ul style="list-style-type: none"> <li>• The competitor is pursuing an innovative and compelling solution that will lead to a sustainable business with paying customers.</li> <li>• The planned Set! Demo Day proof of concept is reasonably ambitious and validates the critical assumptions necessary to advance.</li> </ul>
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**Question 3: Accomplishments and Team** – What have you done to date, and what qualities give you a competitive edge?

<p><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>• Describe your efforts to advance your solution concept since the announcement of the Prize contest or prior and highlight key milestones achieved.</li> <li>• Explain why winning the Ready! Contest will substantively change the likely outcome for the proposed solution.</li> <li>• Introduce your team, explain how it came together, and highlight the knowledge and skills that make it uniquely capable of achieving success.</li> <li>• Highlight your team’s diversity, experience, and its track record that makes it likely to succeed in the prize competition. What experience do you have trying new things, solving difficult problems, and overcoming barriers to bring ideas to reality?</li> <li>• Describe what drives your team to realize this solution and why you will continue when facing difficulties.</li> </ul>	<p><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>• A considerable amount of high-quality effort was put into defining and advancing the proposed solution.</li> <li>• Winning the Ready! Contest will significantly increase the team’s chances of creating a viable business based on this solution.</li> <li>• The team’s track record demonstrates notable entrepreneurial qualities such as adaptability, creativity, decisiveness, and resourcefulness.</li> <li>• This team is diverse and has the knowledge, experience, and determination to transform their proposed solution into a viable business in the near future.</li> </ul>
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**Question 4: Plan** – What is your plan to achieve your goals?

<p><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>• Describe where you stand in your solution’s development cycle and define goals for Set! and Go! Demo Days (based on the schedule listed in <a href="#">Section I.5</a>) and a one-year goal (<b>see special instructions below</b>).</li> <li>• Describe your team’s readiness to meet your</li> </ul>	<p><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>• The stated goals are ambitious, reduce risks, and show a commitment to an accelerated development cycle.</li> <li>• Meeting the stated goals will demonstrate critical progress toward developing, testing,</li> </ul>
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<p>goals and if your team requires additional talent and resources.</p> <ul style="list-style-type: none"> <li>• Provide a high-level budget and plan to meet your goals between the conclusion of the Ready! Contest and the Go! Demo Day, including how you will leverage program resources, members of the American-Made Network, or other entities (include references to letters of support/commitment if applicable).</li> <li>• Describe risks to the development plan and mitigation strategies (e.g., data requirements and plans to acquire the necessary data).</li> </ul>	<p>and validating the functionality and market demand of this innovation.</p> <ul style="list-style-type: none"> <li>• The proposed plan effectively uses resources available in this program to advance the innovation.</li> <li>• Sufficient risks to the development plan have been identified and reasonable risk mitigation strategies have been described.</li> </ul>
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<b>Reviewer Recommendation</b>	
<ul style="list-style-type: none"> <li>• There is no direct corresponding submission requirement for this score. Rather, it is an overall assessment of all materials submitted in HeroX.</li> </ul>	<p style="text-align: center;"><b>Statement is scored as a 1 or 6</b></p> <ul style="list-style-type: none"> <li>• This innovation, team, and plan should be strongly considered for a Ready! Contest prize.</li> </ul>

**Special Instructions for Question 4**

- Use only specific, measurable, achievable, relevant, and timely (SMART) outcome-based goals, not activity-based, so that a neutral third-party can validate them.
  - For example: Demonstrate a definitive achievement of progress (e.g., “X letters of interest signed” or “achieve Y% efficiency”); do **not** describe how you spent your time (e.g., “provide a report,” “talk to customers,” or “perform experiments”).
- SMART goals for the Go! Contest Demo Day should include demonstrating a functional prototype based on learning throughout the competition and at least one committed pilot partner.
- In defining your SMART goals, include quantified, risk-reducing, meaningful, practical, and testable interim milestones.
- SMART goals should include assessment and feedback from many relevant stakeholders (e.g., possible investors, customers, and experts in the solution space, and entities that would be the eventual customers or end users of the product.).
- Members of the American-Made Network may be able to help you formulate your SMART goals.

### Submission Summary Slide (a PowerPoint slide as a PDF will be made public)

Make your own public-facing, one-slide submission summary that contains technically specific details but can be understood by most people. There is no template, so feel free to present the information as you see fit. Please make any text readable in a standard printout and conference room projection.

### Technical Assistance Request (Export from American Made Network Matching Tool)

Upload the Technical Assistance Request generated from the [American-Made Network Matching Tool](#). In the Matching Tool, you are able to identify the areas where you need assistance to realize your solution. The tool considers the unique capabilities that the national laboratories, a private facility, and/or members of the American-Made Network could provide to you to resolve these barriers. Your request is then made broadly available through the tool, so members of the American-Made Network can understand your needs and assist you, with the potential to earn Recognition Rewards for that assistance.

### Letters of Commitment or Support (Optional)

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

**Please read and comply with additional requirements about your submission in [Appendix 1](#).**

**COMPETITORS WHO DO NOT COMPLY WITH THESE REQUIREMENTS MAY BE DISQUALIFIED.**

## 7. HOW WE SCORE

The scoring of submissions will proceed as follows:

- A panel of expert reviewers reads, scores, and comments on each submission. Each bullet listed in the review criteria under the video submission and the narrative questions receives a score from 1 to 6. The bullets have equal weight, so questions that have more review criteria bullets have a greater influence on the final score. The final score from an individual reviewer for a submission package equals the total sum of the scores for all the bullets. All reviewers' scores will then be averaged for a final reviewer score for the submission package. The final prize judge considers reviewer scores when deciding the winners of the prize.

- Reviewers may not have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in this contest, or have a familial or financial relationship with an individual who is a registered competitor.

**Note:** Expert reviewers also provide comments on the submissions they review. The Prize Administrator intends to provide comments to competitors after the winners are announced. These comments are intended to help competitors to continue to improve and iterate on their submissions. The comments are the opinions of the expert reviewers and do not represent the opinions of DOE.

- Interviews: The Prize Administrator, at its sole discretion, may decide to hold a short interview with a subset of the Ready! Contest competitors. Interviews would be held prior to the announcement of winners and would serve to help clarify questions the judge may have. Attending interviews is not required, and interviews are not an indication of winning.

The judge's final determination of winners takes reviewer scores, interview findings (if applicable), and program policy factors listed in [Appendix 1](#) into account. DOE is the judge and final decision maker and may elect to award all, none, or some of the submissions accepted at each submission deadline.

## 8. FIND HELP

Visit <https://americanmadechallenges.org/network.html> to review and contact the members of the American-Made Network who have signed up to help you succeed.

## 9. ADDITIONAL REQUIREMENTS

Please read and comply with additional requirements in [Appendix 1](#).

**COMPETITORS WHO DO NOT COMPLY WITH THESE REQUIREMENTS MAY BE DISQUALIFIED.**

# III. SET! CONTEST RULES

## 1. INTRODUCTION

The American-Made Solar Prize Hardware Track is a three-contest series with up to \$3 million in cash prizes. It is designed to accelerate and sustain solar innovation by supporting entrepreneurs as they develop transformative technology ideas into concepts and then into early-stage prototypes ready for industry testing. It is the first step to set American entrepreneurs on a pathway of accelerated innovation, so ideas can become products in months, not years. The Ready!, Set!, and Go! Contests are structured to provide the resources and environment necessary to create new solution concepts and develop them into early-stage prototypes in rapid learning cycles.

### Set! Contest Prizes

- Up to 10 winners
- \$1 million in total cash prizes and \$750,000 in total vouchers. Each winner receives a cash prize of \$100,000 and \$75,000 in vouchers.

The Set! Contest is the second in this three-contest series and offers a total of \$1 million in cash prizes. Only winners of the Ready! Contest can compete in the Set! Contest. These winners may be referred to as Ready! Contest winners or American-Made Solar Prize Hardware Track semifinalists. Winning the Set! Contest is required to compete in the Go! Contest. **The following rules are for competitors interested in the Set! Contest. “You” and “your” refer to competitors in the contest.**

## 2. GOAL

The goal of the Set! contest period is focused on three key areas:

- **Proof of Concept:** Develop a proof of concept that proves critical solution functionality that can be demonstrated in a video and presentation and/or in person.
- **Customer Discovery:** Perform a rigorous customer discovery process to uncover key insights from entities that would be the eventual customers or end users of the product.
- **Network Activation:** Cultivate a network of mentors and partners to help advance the proposed solution, which can include national laboratories, members of the American-Made Network, funders, and private partners.

Additionally, competitors will prove the market demand for your innovation, show the viability of your business case, and establish an effective approach to validate and pilot test the innovation’s prototype.

### 3. PRIZES TO WIN

The Set! Contest offers up to 10 cash prizes of \$100,000, plus \$75,000 in vouchers. Two-thirds of voucher funds must be spent at a national laboratory, and the remaining third may be spent at a national laboratory or a private facility of the winners' choice. Winners will negotiate the scope of work to be performed under a voucher and can choose which national laboratory and/or private facility will perform the work. For additional information on how the voucher program works, see <https://americanmadechallenges.org/solarprize/connect.html#vouchers>.

### 4. HOW TO ENTER

Complete a submission package online at <http://www.herox.com/solarprizeR5hardware> before the contest closing date.

### 5. SET! CONTEST PROCESS

The Set! Contest consists of five steps:

1. **Progress and Submit** – Competitors work with the American-Made Network<sup>14</sup> to advance their solution as much as possible. Competitors then create their Set! Contest submission packages and submit them online before the Set! Contest Demo Day.
2. **Preliminary Review** – All completed submissions are assigned to subject-matter expert reviewers. Reviewers independently review and score each submission, then participate in the demo day event and provide feedback.
3. **Virtual Demo Day** – Competitors participate in a virtual demo day event with a panel of expert reviewers and members of the public. The details and agenda for the event are provided 30 days before the event.
4. **Selection** – The judge selects up to 10 winners considering the written submission, the performance at the demo day, and the expert reviewer feedback.
5. **Announcement** – The Prize Administrator announces the winners at the demo day event. After receiving the Set! Contest prize, winners can develop their solutions in accordance with their plan to compete in the Go! Contest.

### 6. WHAT TO SUBMIT

A complete submission for the Set! Contest must include the following items:

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<sup>14</sup> The Prize Administrator has dedicated approximately \$260,000 to recognize members of the American-Made Network that help competitors advance through the contests.



Item	Content
Submission Package	<ul style="list-style-type: none"> <li>• 5-minute pitch and technical demonstration video (public)</li> <li>• Cover page content</li> <li>• Narrative that answers four questions about the <i>problem and solution, innovation, team, and plan</i> (not to exceed 2,500 words)</li> <li>• Summary PowerPoint slide (public)</li> <li>• Voucher work slide</li> <li>• Technical assistance request (public)</li> <li>• Letters of commitment or support (optional).</li> </ul>
Virtual Demo Day <sup>15</sup>	<ul style="list-style-type: none"> <li>• Set! Demo Day judges Q&amp;A</li> </ul>

**Note:** Portions of the submission package are made available to the public. These have been denoted as such and DOE does not intend to release the remaining parts of the submission to the public. See [Appendix 1](#) for additional details.

**All documents must be uploaded as a PDF.**

The following details provide more guidance on what information to provide and how judges evaluate and score your submission. Judges will evaluate your submissions by agreeing or disagreeing with assigned statements on a 1–6 scale, as shown below. These statements are the criteria.

1	2	3	4	5	6
strongly disagree	disagree	slightly disagree	slightly agree	agree	strongly agree

**Note:** This submission package is being reviewed by solar industry and entrepreneurial professionals. Cumulatively, they represent decades of experience assessing novel ideas and solutions. However, their background may not be specifically in the problem you are solving. Transition quickly from general background into the details of your problem, solution, and plan.

Pitch and Demo Video 5 minute pitch on your innovation, company, and proof of concept demonstration (public)	
<p><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>• Describe the real-world problem you are solving.</li> <li>• Describe your solution and why it is transformational as compared to existing</li> </ul>	<p><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>• The video explains a compelling real-world problem and solution.</li> <li>• The video demonstrates a proof of concept for an exciting innovation.</li> </ul>

<sup>15</sup> If the demo day is held in person, the requirements for the submission package will likely change. This will be communicated to competitors in advance of the scheduled demo day date.

<p>solutions.</p> <ul style="list-style-type: none"> <li>• Explain the features of your proof of concept and how it works. Demonstrate its functionality or testing of its known possible failure modes.</li> <li>• What progress has been made over the competition period?</li> <li>• What is the scale of the opportunity and what is your target market?</li> <li>• Who are you and why do you have a competitive edge?</li> </ul>	<ul style="list-style-type: none"> <li>• The proof of concept has retired significant technical risk.</li> <li>• Progress has been demonstrated during the competition period.</li> <li>• The video identifies a reasonable target market and a path to making a significant impact on the U.S. solar industry.</li> <li>• The video shows a knowledgeable and skillful team.</li> </ul>
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Post your publicly accessible video online (e.g., YouTube, Vimeo, etc.). Be creative and produce a video that conveys the required information in exciting and interesting ways, but do not focus on time-consuming activities that only improve production values (i.e., technical elements such as décor, lighting, and cinematic techniques). Assistance from others with experience in this area may be helpful. Members of the American-Made Network may be able to help you create your video.

<p><b>Cover Page</b> List basic information about your submission.  <i>Template<sup>16</sup>: <a href="https://www.herox.com/solarprizeR5hardware/resources">https://www.herox.com/solarprizeR5hardware/resources</a><sup>17</sup></i></p>
<ul style="list-style-type: none"> <li>• Project name</li> <li>• Innovation’s tagline (e.g., your mission in a few words)</li> <li>• Link to your online pitch video</li> <li>• Key project members (names, contacts, and links to their LinkedIn profiles)</li> <li>• Keywords that best describe your solution (e.g., perovskite deposition, microinverters)</li> <li>• Your city and state and 9-digit zip code</li> <li>• The partners, affiliates, and Connectors<sup>18</sup> that significantly helped you<sup>19</sup> advance your solution and the major items they helped with (if applicable).</li> </ul>

You should answer each of the following four questions. The content bullets are only suggestions to guide your responses. You decide where to focus your answers. The individual answers to the four questions do not have a word limit; however, **the aggregate response to these four questions must not exceed 2,500 words**, not including captions, figures/graphs, or references. **A word count must be included** at the end of your submission (see template for details). You may also include up

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<sup>16</sup> Use of the template is optional; however, all components listed here must be included in your document if you chose to create your own.

<sup>17</sup> **Important:** Templates from the Ready! competition have been updated for Set!.

<sup>18</sup> See description of Connector in [I. Program Summary](#)

<sup>19</sup> Remember that you can incentivize Connectors help by agreeing to identify them here (up to 3) to receive a cash reward for that help, regardless of if you win the Set! competition. See the description of Recognition Rewards in [I. Program Summary](#) and the [Connector Guidelines](#) for details.

**to five supporting images, figures, or graphs.** The reviewers will score the questions based on the content you have provided.

**Note:** If your concept/innovation has substantially pivoted from your original submission, you must provide an explanation of how and why this happened. It is understood that innovation and entrepreneurship are not usually a linear path, but major changes in direction should always be well rationalized. You were selected on the strengths of the idea submitted in the Ready! Contest, and significant changes without justification are unlikely to be successful.

<b>Narrative (PDF)</b> <b>Max 2,500 Words and 5 Supporting Images or Figures</b> <i>Template<sup>20</sup>: <a href="https://www.herox.com/solarprizeR5hardware/resources">https://www.herox.com/solarprizeR5hardware/resources</a></i>	
<b>Question 1: <i>Problem &amp; Solution</i></b> – What is the problem, and how are you solving it?	
<p style="text-align: center;"><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>Describe the problem, being specific to the problem space that your innovation addresses<sup>21</sup> and why existing solutions are inadequate.</li> <li>Describe your innovation and how it is better than existing products or emerging solutions. Show how you know this, using evidence-based validation (e.g., interviews with users and experts).</li> <li>Describe your innovation’s unique value propositions and how these lead to a sustainable business with paying customers.</li> </ul>	<p style="text-align: center;"><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>The competitor quantifies a critical problem, and their assessment of current solutions shows a comprehensive understanding of the problem-solution space.</li> <li>The solution represents an innovative approach built on reasonable assumptions, a valid technical foundation, and lessons learned from experience gained.</li> <li>The competitor is pursuing an innovative and compelling solution, which will lead to a sustainable business with paying customers.</li> </ul>

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<sup>20</sup> Use of the template is optional; however, all components listed here must be included in your document if you chose to create your own. The provided template has been updated from the Ready! competition.

<sup>21</sup> Avoid providing general background on the rapid growth of the solar industry or other high-level trends with which the reviewers are well versed.

<b>Question 2: <i>Innovation</i></b> – What progress have you made to prove your solution will be successful?	
<p><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>Describe the current state of development of your proof of concept, its technical specifications, and sufficient underlying details on how it works to facilitate external evaluation of the performance claims you make.<sup>22</sup></li> <li>Describe the progress made over the contest period and highlight key engagements, relationships, and milestones.</li> <li>Describe how you have validated your technical performance assumptions.</li> <li>Describe who gave feedback on your proof of concept, why it is important, and changes you made as a result of that feedback.</li> <li>Describe your business model, cost model, and potential price points.</li> </ul>	<p><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>Sufficient technical detail was provided to understand the underlying principles of operation of the innovation.</li> <li>The proof of concept is grounded in real-world assumptions and resolves critical technical risks.</li> <li>A considerable amount of high-quality effort was put into building a proof of concept and advancing the innovation.</li> <li>A rigorous customer discovery process was performed to uncover key insights and relevant feedback on the proof of concept.</li> <li>The assumptions around the business model and pricing are reasonable, achievable, and competitive.</li> </ul>
<b>Question 3: <i>Team</i></b> – What qualities give you a competitive edge, and how have you grown?	
<p><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>Introduce your team and highlight the diversity, knowledge, and skills that make the team uniquely capable of achieving success.</li> <li>Describe how your team has evolved during the competition, including any strategic hires or partnerships.</li> <li>Explain why winning the Set! Contest will substantively change the likelihood of your success.</li> </ul>	<p><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>The team’s drive, diversity, knowledge, and complementary skill sets provide a strong competitive edge toward realizing this solution in the near future.</li> <li>The team identified skill gaps and brought in the right people or partners to fill those gaps.</li> <li>Winning the Set! Contest significantly increases the team’s chances of creating a viable business based on this solution.</li> </ul>
<b>Question 4: <i>Plan</i></b> – What is your plan to achieve your goals?	
<p><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>Provide the goals submitted in the Ready! Contest submission package and describe</li> </ul>	<p><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>The competitors are successfully meeting prior goals and demonstrating continued</li> </ul>

<sup>22</sup> Avoid characterizing core innovations as proprietary and thus preventing independent evaluation by the expert judges. It is the intent of the Prize Administrator that, unless otherwise noted, no parts of the submitted materials be released to the public (see [Appendix 1](#) for more details).

<p>the actual outcomes. Update goals for the Go! Demo Day and define goals for the next 180 and 365 days (see special instructions below).</p> <ul style="list-style-type: none"> <li>• Describe your team’s readiness to meet your goals and the need for additional talent and/or resources.</li> <li>• Describe the specific functional improvements your prototype will demonstrate at the next demo day.</li> <li>• Provide a high-level budget plan to meet your goals for the next 180 days, including how you will leverage program resources—specifically the voucher funds, members of the American-Made Network, or other entities.</li> <li>• Describe risks to the development plan and mitigation strategies (e.g. certification timelines or dependence on third-parties).</li> </ul>	<p>critical progress toward testing and validating the functionality and market demand of this innovation.</p> <ul style="list-style-type: none"> <li>• Stated Go! Contest Demo Day goals and 180- and 365-day goals are ambitious and risk-reducing, and they show a commitment to an accelerated solution development cycle.</li> <li>• The competitors’ approach to complete their proposed plan is well-reasoned and makes good use of the program resources available to them (such as national laboratories and the American-Made Network).</li> <li>• Sufficient risks to the development plan have been identified and reasonable risk mitigation strategies have been described.</li> </ul>
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<p style="text-align: center;"><b>Reviewer Recommendation</b></p>	
<ul style="list-style-type: none"> <li>• There is no direct corresponding submission requirement for this score. Rather, it is an overall assessment of all materials submitted in HeroX.</li> </ul>	<p style="text-align: center;"><b>Statement is scored as a 1 or 6</b></p> <ul style="list-style-type: none"> <li>• This innovation, team, and plan should be strongly considered for a Set! Contest Prize.</li> </ul>

**Special instructions for Question 4**

- Use only specific, measurable, achievable, relevant, and timely (SMART) outcome-based goals, not activity-based, so that a neutral third-party can validate them (if possible).
  - For example: Demonstrate a definitive achievement of progress (e.g., “X letters of interest signed” or “achieve Y% efficiency”); do **not** describe how you spent your time (e.g., “provide a report,” “talk to customers,” or “perform experiments”).
- SMART goals for the Go! Contest Demo Day should include demonstrating a functional prototype based on learning throughout the competition and at least one committed pilot test partner.
- In defining your SMART goals, include quantified, risk-reducing, meaningful, practical, and testable interim milestones.
- SMART goals should include assessment and feedback from many relevant stakeholders (e.g., possible investors, customers, and experts in the solution space, and entities that would be the eventual customers or end users of the product.).

- Members of the American-Made Network may be able to help you to formulate your SMART goals.

### Submission Summary Slide (a PowerPoint slide as a PDF will be made public)

Make your own public-facing, one-slide submission summary, which contains technically specific details but can be understood by most people. There is no template, so feel free to present the information as you see fit. Please make any text readable in a standard printout and conference room projection.

### Voucher Work Slide (a PowerPoint slide as a PDF) Template : <https://www.herox.com/solarprizeR5hardware/resources>

Using the Voucher Work Slide template, describe how you will use your voucher funds, including the entities you plan to engage and what they will do with the voucher funds. Provide one slide per entity—national laboratory and/or private facility—that you plan to engage. Include a maximum of two slides.

### Technical Assistance Request (Export from American Made Network Matching Tool)

Upload the Technical Assistance Request generated from the [American-Made Network Matching Tool](#). In the Matching Tool, you can identify the areas where you need assistance to realize your solution. The tool considers the unique capabilities that the national laboratories, a private facility, and/or members of the American-Made Network could provide to help you overcome these barriers. Your request is then made broadly available through the tool, so members of the American-Made Network can understand your needs and assist you, with the potential to earn Network Recognition Awards for that assistance.

### Letters of Commitment or Support (optional, as a PDF)

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

### Virtual Demo Day Event

You are required to participate in a demo day event with a panel of expert reviewers that may involve a pitch, a closed-door question-and-answer session, and/or a technical demonstration. Reviewers review and score your submitted material before the demo day and then, based on your demo day performance and deliberation with the judge, they will finalize their recommendations for winners on the demo day. At least one representative from each team must be present at the demo day for the team to be considered for a Set! Prize.

**Please read and comply with additional requirements about your submission in [Appendix 1](#).**

## COMPETITORS WHO DO NOT COMPLY WITH THESE REQUIREMENTS MAY BE DISQUALIFIED.

### 7. HOW WE SCORE

The scoring of submissions will proceed as follows:

- A panel of expert reviewers read, score, and comment on each submission. Each bullet listed in the review criteria under the video submission and the narrative questions receives a score from 1 to 6. The bullets have equal weight, so questions that have more review criteria bullets have a greater influence on the final score. The final score from an individual reviewer for a submission package equals the total sum of the scores for all the bullets. All reviewers' scores are then averaged for a final reviewer score for the submission package. The final prize judge considers reviewer scores when deciding the winners.
  - Reviewers may not have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in this contest; or have a familial or financial relationship with an individual who is a registered competitor.

**Note:** Expert reviewers will also provide comments on the submissions they review. The Prize Administrator intends to provide comments to competitors after the winners are announced. These comments are intended to help competitors to continue to improve and iterate on their submissions. The comments are the opinions of the expert reviewers and do not represent the opinions of DOE.

- Interviews: The Prize Administrator, at its sole discretion, may decide to hold a short interview with a subset of the Set! Contest competitors. Interviews would be held prior to the announcement of winners and would serve to help clarify questions the judge may have. Attending interviews is not required, and interviews are not an indication of winning.

The judge's final determination of winners will take reviewer scores, team performance on the demo day, reviewer deliberation, interview findings (if applicable), and program policy factors listed in [Appendix 1](#) into account. DOE is the judge and final decision maker and may elect to award all, none, or some of the submissions accepted at each submission deadline.

### 8. FIND HELP

Visit <https://network.americanmadechallenges.org/> to review and contact the members of the American-Made Network who have signed up to help you succeed.

### 9. ADDITIONAL REQUIREMENTS

Please read and comply with additional requirements in [Appendix 1](#).

**COMPETITORS WHO DO NOT COMPLY WITH THESE REQUIREMENTS MAY BE  
DISQUALIFIED.**



# IV. GO! CONTEST RULES

## 1. INTRODUCTION

The American-Made Solar Prize Hardware Track is a three-contest series with up to \$3 million in cash prizes. It is designed to accelerate and sustain solar innovation by supporting entrepreneurs as they develop transformative technology ideas into concepts and then into early-stage prototypes ready for industry testing. It is the first step to set American entrepreneurs on a pathway of accelerated innovation, so ideas can become products in months, not years. The Ready!, Set!, and Go! Contests are structured to provide the resources and environment necessary to create new solution concepts and develop them into early-stage prototypes in rapid learning cycles.

### Go! Contest Prizes

- Up to two Winners
- \$1 million in total cash prizes and \$150,000 in total vouchers. Each winner receives a cash prize of \$500,000 and \$75,000 in vouchers.

The Go! Contest is the third in this three-contest series offering a total of \$1 million in cash prizes. Only winners of the Set! Contest can compete in the Go! Contest. These winners are referred to as Set! Contest winners or American-Made Solar Prize Hardware Track Finalists. **The following guidelines are for competitors interested in the Go! Contest. “You” and “your” reference competitors in the contest.**

## 2. GOAL

The goal of the Go! contest period is focused on four key areas:

- **Prototype Development:** The completion of a prototype that incorporates lessons learned and feedback from potential users that can be demonstrated in a video and presentation and/or in person.
- **Pilot-Test Partnering:** The development of committed pilot partner as evidenced by a legally binding agreement to conduct a pilot test.<sup>23, 24</sup>
- **Network Development:** The solidification of a core network of mentors and partners to work with to help advance the proposed solution which can include national labs, members of the American-Made Network, funders, and private partners.
- **Post-Contest Planning:** The development of a long-term plan for the ongoing success of the effort—specifically, a compelling case that there is, or will soon be, sufficient funding in

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<sup>23</sup> Enforceability of the pilot test agreement between the competitor and the pilot test partner may be contingent on the competitor winning the Go! Contest.

<sup>24</sup> ‘Pilot test’ is not rigidly defined. It is up to the Go! competitors to produce the most compelling submission possible to show a real world test of the proposed solution with a relevant third party customer or user in need of the solution.

place to keep the effort going beyond this prize contest.

Additionally, competitors will identify pilot test partner(s) and use continual customer and stakeholder feedback to substantially advance their solution from proof of concept to prototype.

### 3. PRIZES TO WIN

The Go! Contest offers two \$500,000 cash prizes, plus \$75,000 in vouchers. Two-thirds of voucher funds must be spent at a national laboratory, and the remaining third may be spent at a national laboratory or a private facility of the winners' choice. Winners will negotiate the scope of work to be performed under a voucher and can choose which national laboratory and/or private facility will perform the work. For additional information on how the voucher program will work, see <https://americanmadechallenges.org/solarprize/connect.html#vouchers>.

### 4. HOW TO ENTER

Complete a submission package online at <http://www.herox.com/solarprizeR5hardware> before the contest closing date.

### 5. GO! CONTEST PROCESS

The Go! Contest consists of five important steps:

1. **Progress and Submit** – Competitors work with the American-Made Network<sup>25</sup> to advance their solution as much as possible and identify a pilot partner. Competitors then create their Go! Contest submission packages and submit them online before the Go! Contest Demo Day.
2. **Preliminary Review** – All completed submissions will be assigned to subject-matter expert reviewers. Reviewers will independently review and score each submission, then participate in the demo day event and provide feedback.
3. **Demo Day** – Competitors will participate in a demo day event with a panel of expert reviewers and members of the public. The details and agenda for the event will be provided 30 days in advance of the event.
4. **Selection** – The judge selects two winners, considering the written submission, the expert reviewer feedback, and the performance at the demo day..
5. **Announcement** – As a part of the demo day, the Prize Administrator will announce winners. After receiving the Go! Contest prize, winners can develop their solutions in accordance with the plan submitted as a part of the Go! Contest.

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<sup>25</sup> The Prize Administrator has dedicated approximately \$260,000 to recognize members of the American-Made Network that help competitors advance through the contests.

## 6. WHAT TO SUBMIT

A complete submission for the Go! Contest must include the following items:

Item	Content
Submission Package	<ul style="list-style-type: none"> <li>• 6-minute pitch and technical demonstration video (public)</li> <li>• Cover page content</li> <li>• Narrative that answers four questions about the <i>problem and solution, innovation, team, and plan</i> (not to exceed 2,500 words)</li> <li>• Summary PowerPoint slide (public)</li> <li>• Voucher work slide</li> <li>• Technical assistance request (public)</li> <li>• Letters of commitment (mandatory) or support (optional)</li> </ul>
Virtual Demo Day <sup>26</sup>	<ul style="list-style-type: none"> <li>• Go! Demo Day judges Q&amp;A</li> </ul>

**Note:** Portions of the submission package are made available to the public. These have been denoted as such and DOE does not intend to release the remaining parts of the submission to the public. See [Appendix 1](#) for additional details.

### All documents must be uploaded as a PDF.

The following details provide more guidance on what information to provide and how judges evaluate and score your submission. Judges will evaluate your submissions by agreeing or disagreeing with assigned statements on a 1–6 scale, as shown below. These statements are the criteria.

1	2	3	4	5	6
strongly disagree	disagree	slightly disagree	slightly agree	agree	strongly agree

**Note:** This submission package will be reviewed by solar industry and entrepreneurial professionals. Cumulatively, they represent decades of experience assessing novel ideas and solutions. However, their background may not be specifically in the problem you are solving. Transition quickly from general background into the details of your problem, solution, and plan.

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<sup>26</sup> If the demo day is held in person, the requirements for the submission package will likely change. This will be communicated to competitors in advance of the scheduled demo day date.

**Pitch and Demo Video** 6 minute pitch on your innovation, company, and prototype demonstration (public)

**Suggested content you provide**

- Describe the real-world problem you are solving.
- Describe your solution and why it is transformational as compared to existing solutions.
- Explain the features of your prototype and how it works. Demonstrate its functionality or testing of its known possible failure modes.
- What progress has been made over the competition period?
- What is the scale of the opportunity and what is your target market?
- Who are you and why do you have a competitive edge?

**Each statement is scored on a 1–6 scale**

- The video explains a compelling real-world problem and solution.
- The video demonstrates a prototype for an exciting innovation.
- The prototype has retired significant technical risk.
- Progress has been demonstrated during the competition period.
- The video identifies a reasonable target market and a path to making a significant impact on the U.S. solar industry.
- The video shows a knowledgeable and skillful team.

Post your publicly accessible video online (e.g., YouTube, Vimeo). Be creative and produce a video that conveys the required information in exciting and interesting ways, but do not focus on time-consuming activities that only improve production values (i.e., technical elements such as décor, lighting, and cinematic techniques). Assistance from others with experience in this area may be helpful. Members of the American-Made Network may be able to help you create your video.

**Cover Page** List basic information about your submission.

**Template<sup>27</sup>:** <https://www.herox.com/solarprizeR5hardware/resources<sup>28</sup>>

- Project name
- Innovation's tagline (e.g., your mission in a few words)
- Link to your online pitch video
- Key project members (names, contacts, and links to their LinkedIn profiles)
- Keywords that best describe your solution (e.g., perovskite deposition, microinverters)
- Your city and state and 9-digit zip code

<sup>27</sup> Use of the template is optional; however, all components listed here must be included in your document if you chose to create your own.

<sup>28</sup> **Important:** Templates from the Set! competition have been updated for Go!.

- The partners, affiliates, and Connectors<sup>29</sup> that significantly helped you<sup>30</sup> advance your solution and the major items they helped with (if applicable).

You should answer each of the following four questions. The content bullets are only suggestions to guide your responses. You decide where to focus your answers. The individual answers to the four questions do not have a word limit; however, **the aggregate response to these four questions must not exceed 2,500 words**, not including captions, figures/graphs, or references. **A word count must be included** at the end of your submission (see template for details). You may also include **up to five supporting images, figures, or graphs**. The reviewers will score the questions based on the content you have provided.

Narrative (PDF) Max 2,500 Words and 5 Supporting Images or Figures Template <sup>31</sup> : <a href="https://www.herox.com/solarprizeR5hardware/resources" style="color: white;">https://www.herox.com/solarprizeR5hardware/resources</a>	
<b>Question 1: <i>Problem &amp; Solution</i></b> – What is the problem, and how are you solving it?	
<p style="text-align: center;"><b>Suggested content you provide</b></p> <ul style="list-style-type: none"> <li>• Describe the problem, being specific to the problem space that your innovation addresses<sup>32</sup> and why existing solutions are inadequate.</li> <li>• Describe your innovation and how it is better than existing products or emerging solutions. Show how you know this, using evidence-based validation (e.g., interviews with users and experts).</li> <li>• Describe your innovation’s unique value propositions and how these lead to a sustainable business with paying customers.</li> </ul>	<p style="text-align: center;"><b>Each statement is scored on a 1–6 scale</b></p> <ul style="list-style-type: none"> <li>• The competitor quantifies a critical problem, and their assessment of current solutions shows a comprehensive understanding of the problem-solution space.</li> <li>• The solution represents an innovative approach built on reasonable assumptions, a valid technical foundation, and lessons learned from experience gained.</li> <li>• The competitor is pursuing an innovative and compelling solution, which will lead to a sustainable business with paying customers.</li> </ul>

<sup>29</sup> See description of Connector in [I. Program Summary](#).

<sup>30</sup> Remember that you can incentivize Connectors help by agreeing to identify them here (up to 3) to receive a cash reward for that help, regardless of if you win the Go! Contest. See the description of Recognition Rewards in [I. Program Summary](#) and the [Connector Guidelines](#) for details.

<sup>31</sup> Use of the template is optional; however, all components listed here must be included in your document if you chose to create your own. The provided template has been updated from the Set! competition.

<sup>32</sup> Avoid providing general background on the rapid growth of the solar industry or other high-level trends with which the reviewers are well versed.

**Question 2: *Innovation*** – What progress have you made to prove your solution will be successful?

<b>Suggested content you provide</b>	<b>Each statement is scored on a 1–6 scale</b>
<ul style="list-style-type: none"> <li>• Describe the current state of development of your prototype, its technical specifications, and sufficient underlying details on how it works to facilitate external evaluation of the performance claims you make.<sup>33</sup></li> <li>• Describe the progress made over the contest period and highlight key engagements, relationships, and milestones.</li> <li>• Describe how you have validated your technical performance assumptions.</li> <li>• Describe how you utilized the voucher to get feedback on your prototype, why it is important, and changes you made as a result of that feedback.</li> <li>• Describe your business model, cost model, and potential price points.</li> <li>• Describe your committed pilot test partner(s), their interest in your solution, level of commitment, and expected pilot testing outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>• Sufficient technical detail was provided to understand the underlying principles of operation of the innovation.</li> <li>• The prototype is grounded in real-world assumptions and resolves critical technical risks.</li> <li>• A considerable amount of high-quality effort was put into building a prototype and advancing the innovation.</li> <li>• The voucher was effectively utilized to uncover key insights and provide relevant feedback on the prototype.</li> <li>• The assumptions around the business model and pricing are reasonable, achievable, and competitive.</li> <li>• The committed pilot test partner has the need for, and capability to, pilot test and potentially utilize this innovation.</li> </ul>

**Question 3: *Team*** – What qualities give you a competitive edge, and how have you grown?

<b>Suggested content you provide</b>	<b>Each statement is scored on a 1–6 scale</b>
<ul style="list-style-type: none"> <li>• Introduce your team and how it has evolved, highlighting the diversity, knowledge, and skills that make the team uniquely capable of achieving success.</li> <li>• Describe how you identified your committed pilot test partner and discuss the rationale behind working with this partner versus others.</li> <li>• Explain why winning the Go! Contest will substantively change the likelihood of your success.</li> </ul>	<ul style="list-style-type: none"> <li>• The team’s drive, diversity, knowledge, and complementary skill sets provide a strong competitive edge toward realizing this solution in the near future.</li> <li>• The committed pilot test partner is highly relevant to the identified path to market.</li> <li>• Winning the Go! Contest significantly increases the team’s chances of creating a viable business based on this solution.</li> </ul>

<sup>33</sup> Avoid characterizing core innovations as proprietary and thus preventing independent evaluation by the expert judges. It is the intent of the Prize Administrator that, unless otherwise noted, no parts of the submitted materials be released to the public (see [Appendix 1](#) for more details).

**Question 4: *Plan*** – What is your plan to achieve your goals?

Suggested content you provide	Each statement is scored on a 1–6 scale
<ul style="list-style-type: none"> <li>• Provide the previous contest goals and describe the actual outcomes. Define goals for the next 90, 180, and 365 days (see special instructions below).</li> <li>• Describe the discrete improvements and functionality to the prototype you plan to implement over the next 90 to 180 days</li> <li>• Describe the details of the pilot test (strategy, timeline, outcomes, critical test, etc.)</li> <li>• Provide a high-level budget plan to meet your goals for the next 180 days, including how you will leverage program resources—specifically the voucher funds, members of the American-Made Network, or other entities.</li> <li>• Describe risks to the development plan and mitigation strategies (e.g. certification timelines or dependence on third-parties).</li> </ul>	<ul style="list-style-type: none"> <li>• The competitors are successfully meeting prior goals and demonstrating continued critical progress toward testing and validating the functionality and market demand of this innovation.</li> <li>• Stated 90- and 180-day goals are ambitious and risk-reducing, and they show a commitment to an accelerated solution development cycle.</li> <li>• The approach to complete the planned pilot test, and advance the innovation forward beyond this contest, is well-reasoned and feasible.</li> <li>• The competitors’ approach to complete their proposed plan is well-reasoned and makes good use of the program resources available to them (such as national laboratories and the American-Made Network).</li> <li>• Sufficient risks to the development plan have been identified and reasonable risk mitigation strategies have been described.</li> </ul>

**Reviewer Recommendation**

<ul style="list-style-type: none"> <li>• There is no direct corresponding submission requirement for this score. Rather, it is an overall assessment of all materials submitted in HeroX.</li> </ul>	<p><b>Statement is scored as a 1 or 6</b></p> <ul style="list-style-type: none"> <li>• This innovation, team, and plan should be strongly considered for a Go! Contest Prize.</li> </ul>
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**Special instructions for Question 4**

- Use only specific, measurable, achievable, relevant, and timely (SMART) outcome-based goals, not activity-based, so that a neutral third-party can validate them (if possible).
  - For example: Demonstrate a definitive achievement of progress (e.g., “X letters of interest signed” or “achieve Y% efficiency”); do **not** describe how you spent your time (e.g., “provide a report,” “talk to customers,” or “perform experiments”).
- SMART goals for the next 90 and 180 days should include demonstrating continued prototype refinement and an increasing number of customers.

- In defining your SMART goals, include quantified, risk-reducing, meaningful, practical, and testable interim milestones.
- SMART goals should include assessment and feedback from many relevant stakeholders (e.g., possible investors, customers, and experts in the solution space, and entities that would be the eventual customers or end users of the product.).
- Members of the American-Made Network may be able to help you to formulate your SMART goals.

### **Submission Summary Slide (a PowerPoint slide as a PDF will be made public)**

Make your own public-facing, one-slide submission summary, which contains technically specific details but can be understood by most people. There is no template, so feel free to present the information as you see fit. Please make any text readable in a standard printout and conference room projection.

### **Voucher Work Slide (a PowerPoint slide as a PDF)**

**Template:** <https://www.herox.com/solarprizeR5hardware/resources>

Using the Voucher Work Slide template, describe how you will use your voucher funds, including the entities you plan to engage and what they will do with the voucher funds. Provide one slide per entity—national laboratory and/or private facility—that you plan to engage. Include a maximum of two slides.

### **Technical Assistance Request (Export from American Made Network Matching Tool)**

Upload the Technical Assistance Request generated from the [American-Made Network Matching Tool](#). In the Matching Tool, you can identify the areas where you need assistance to realize your solution. The tool considers the unique capabilities that the national laboratories, a private facility, and/or members of the American-Made Network could provide to help you overcome these barriers. Your request is then made broadly available through the tool, so members of the American-Made Network can understand your needs and assist you, with the potential to earn Network Recognition Awards for that assistance.

### **Letters of Commitment (mandatory) or Support (optional, as a PDF)**

Competitors must submit letters of commitment from relevant entities (i.e., end users of the proposed solution). You are also required to provide a legally binding letter of commitment to pilot test.



## Demo Day Event<sup>34</sup>

You are required to participate in a demo day event with a panel of reviewers that may involve a pitch, a closed-door question-and-answer session, and/or a technical demonstration. Reviewers review and score your submitted material before the demo day and then, based on your demo day performance and deliberation with the judges, they will finalize their recommendations for winners on the demo day. At least one representative from each team must be present at the demo day for the team to be considered for a Go! Prize.

Please read and comply with additional requirements about your submission in [Appendix 1](#).

**COMPETITORS WHO DO NOT COMPLY WITH THESE REQUIREMENTS MAY BE DISQUALIFIED.**

## 7. HOW WE SCORE

The scoring of submissions will proceed as follows:

- A panel of expert reviewers read, score, and comment on each submission. Each bullet listed in the review criteria under the video submission and the narrative questions receive a score from 1 to 6. The bullets have equal weight, so questions that have more review criteria bullets have a greater influence on the final score. The final score from an individual reviewer for a submission package equals the total sum of the scores for all the bullets. All reviewers' scores are then averaged for a final reviewer score for the submission package. The final prize judge considers reviewer scores when deciding the winners of the Prize.
  - Reviewers may not have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in this contest; or have a familial or financial relationship with an individual who is a registered competitor.

**Note:** Expert reviewers will also provide comments on the submissions they review. The Prize Administrator intends to provide comments to competitors after the winners are announced. These comments are intended to help competitors to continue to improve and iterate on their submissions. The comments are the opinions of the expert reviewers and do not represent the opinions of DOE.

- Interviews: The Prize Administrator, at its sole discretion, may decide to hold a short interview with a subset of the Go! Contest competitors. Interviews would be held prior to the

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<sup>34</sup> This event is intended to be held in person. However, if circumstances require this event to be held virtually, the decision will be made and communicated to competitors in advance of the scheduled demo day date. If it is held in person, competitors are required to organize their own travel and accommodations to participate in the demo day.

announcement of winners and would serve to help clarify questions the judge may have. Attending interviews is not required and interviews are not an indication of winning.

The judge's final determination of winners will take reviewer scores, team performance on the demo day, reviewer deliberation, interview findings (if applicable), and program policy factors listed in [Appendix 1](#) into account. DOE is the judge and final decision maker and may elect to award all, none, or some of the submissions accepted at each submission deadline.

## 8. FIND HELP

Visit <https://americanmadechallenges.org/network.html> to review and contact the members of the American-Made Network who have signed up to help you succeed.

## 9. ADDITIONAL REQUIREMENTS

Please read and comply with additional requirements in [Appendix 1](#).

**COMPETITORS WHO DO NOT COMPLY WITH THESE REQUIREMENTS MAY BE DISQUALIFIED.**

# V. APPENDIX 1: ADDITIONAL TERMS AND CONDITIONS

## 1. UNIVERSAL CONTEST REQUIREMENTS

Your submission for the Ready!, Set!, and Go! Contests is subject to following terms and conditions:

- If any team member is actively receiving funding from SETO at the Ready! submission deadline, SETO will review any potential prize awards, as well as other DOE funding, and make a decision as to whether awarding a prize to individuals or entities already receiving funding is in line with the program policy factors stated later in these rules ([Section V.14](#)).
- Competitors who won any contest in a previous round of the American-Made Solar Prize Hardware Track are discouraged from submitting the same or similar idea to a future round of the Prize.
- You must post the final content of your submission or upload the submission form online at <http://www.herox.com/solarprizeR5hardware> before the Ready!, Set!, and Go! Contests close. Late submissions or any other form of submission do not qualify.
- The video submission, summary slide, and technical assistance request will be made public.
- The cover page, narrative, and letters of commitment/support are not intended to be made public; however, see [Section V.11](#) regarding the Freedom of Information Act (FOIA).
- You agree to release your submission video under a Creative Commons Attribution 4.0 International License (see <http://creativecommons.org/licenses/by/4.0/>).
- You must include all the required submission's elements. The Prize 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 PDF readable and searchable format. Scanned handwritten submissions will be disqualified.
- Competitors will be disqualified if during any engagement with the Solar Prize Hardware Track, including but not limited to the submission, the online forum, emails to the Prize Administrator, or other forms of communication contain any matter that, in the discretion of DOE, is indecent, 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 contests described in this document, these rules will form a valid and binding agreement between you

and DOE and is 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 contests described here and no other contests on the HeroX platform or anywhere else.

- The Prize Administrator, when feasible, may give competitors an opportunity to fix nonsubstantive mistakes or errors in their submission packages.

## 2. VOUCHER PAIRING SYSTEM

The Prize Administrator will coordinate with the other DOE national laboratories and cultivate relationships with private fabrication facilities that are willing to work with competitors. Ready! and Set! Contest winners will then include their planned use of voucher funds as part of the Set! and Go! Contest submission. Winners of the Set! and Go! Contest will then be able to negotiate specifics with either their laboratory partner or private facility and quickly begin voucher work.

Although winners can choose where they spend their voucher funding, two-thirds of voucher funds must be spent at a national laboratory, and the remaining third may be spent at a national laboratory or a private facility of the winners' choice. In the case of a national laboratory, the funds will be provided directly to the laboratory on behalf of the winners to conduct a mutually-agreed-on scope-of-work between the laboratory and the winners. When vouchers are used at a non-national laboratory facility, the winners will be reimbursed after the voucher work is complete. Voucher funds may not be redeemed for cash or transferred.

Further details about the voucher process are provided at the vouchers website:  
<https://americanmadechallenges.org/solarprize/connect.html#vouchers>.

## 3. VERIFICATION FOR PAYMENTS

The Prize Administrator will verify the identity and the role of a participant potentially qualified to receive the prizes. Receiving a prize payment is contingent upon fulfilling all requirements contained herein. The Prize Administrator will notify winning competitors using provided email contact information after the date that results are announced. Each competitor (or parent/guardian if under 18 years of age), will be required to sign and return to the Prize Administrator, within 30 days of the date the notice is sent, a completed National Renewable Energy Laboratory Request for ACH Banking Information form and a completed W9 form (<https://www.irs.gov/pub/irs-pdf/fw4.pdf>). At the sole discretion of the Prize Administrator, a winning competitor will be disqualified from the competition and receive no prize funds if: (i) the person/entity cannot be contacted; (ii) the person/entity fails to sign and return the required documentation within the required time period; (iii) the notification is returned as undeliverable; or (iv) the submission or person/entity is disqualified for any other reason.

## 4. TEAMS AND SINGLE-ENTITY AWARDS

The Prize 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 prize funds among its member competitors as they deem appropriate.

## 5. SUBMISSION RIGHTS

The public videos in this contest must be submitted and released to the public under a Creative Commons Attribution 4.0 International License (see <http://creativecommons.org/licenses/by/4.0/>).

By making a submission and consenting to the rules of the contest, a competitor is granting to DOE, the Prize 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 purpose. This license includes posting or linking to the public portions of the submission on the Prize Administrator’s or HeroX’s applications, on 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, the Prize Administrator, and judges for purposes of the contests, including, but not limited to, screening and evaluation purposes. The Prize Administrator and any third parties acting on their behalf will also have the right to publicize the competitors’ names and, as applicable, the names of competitors’ team members and organizations, which participated in the submission on the contest website indefinitely.

By entering, Competitor represents and warrants that:

The competitor is the sole, original author and copyright owner of the submission or that the applicant 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, trade secret, trademark, nondisclosure agreement, patent, or upon any other third-party rights; and that the submission is free of malware.

## 6. 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 applicant, or that the applicant 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 upon any other third-party rights of which the applicant is aware; and that the submission is free of malware.

## 7. 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 Contest 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 awards are contingent upon the availability of appropriations.

## 8. RESOLUTION OF DISPUTES

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

In the event of a dispute, 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. Competitors and potential winners may be required to show proof of being the authorized account holder.

The Prize Administrator will not arbitrate, intervene, advise on, or resolve any matters between team members or any disputes between teams.

## 9. PUBLICITY

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

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

## 10. LIABILITY

Upon registration, all participants agree to assume and, thereby, have assumed any and all risks of injury or loss in connection with or in any way arising from participation in this contest or development of any submission. 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 Director of SETO, the Director has determined that no liability insurance will be required of competitors to compete in this competition, per 15 USC 3719(i)(2).

## 11. RECORDS RETENTION AND FREEDOM OF INFORMATION ACT (FOIA)

All materials submitted to DOE as part of a submission become DOE records. Any confidential commercial information contained in a submission should be designated at the time of submission.

Competitors are encouraged to employ protective markings in the following manner:

- The cover sheet of the submission must be marked as follows and identify the specific pages containing trade secrets or commercial or financial information that is privileged or confidential:

Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this document may contain trade secrets or commercial or financial information that is privileged or confidential and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. [End of Notice]

- The header and footer of every page that contains trade secrets or privileged commercial or financial information must be marked as follows: “May contain trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure.”
- In addition, each line or paragraph containing trade secrets or commercial or financial information that is privileged or confidential must be enclosed in brackets.

Competitors will be notified of any FOIA 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 FOIA representative prior to the release of materials.

## 12. 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.

## 13. 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 failures, 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.

Although DOE indicates in the Ready!, Set!, and Go! Contests 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 prize money.

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

## **14. PROGRAM POLICY FACTORS**

While the scores of the expert reviewers will be carefully considered, it is the role of the Prize Administrator to maximize the impact of contest 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 in a variety of solar markets
- Whether the use of additional DOE funds and provided resources continue to be nonduplicative and compatible with the stated goals of this program and DOE's 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 level of industry involvement and demonstrated ability to accelerate commercialization and overcome key market barriers
- The degree to which the submission is likely to lead to increased employment and manufacturing in the United States or provide other economic benefit 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 efforts or projects, which, when taken together, will best achieve the research goals and objectives
- The degree to which the submission expands DOE's funding to new competitors and recipients that have not been supported by DOE in the past
- The degree to which the submission exhibits team member diversity and the inclusion of underrepresented groups, with participants including but not limited to graduates and students of historically black colleges and universities (HBCUs) and other minority serving institutions (MSIs) or members operating within Qualified Opportunity Zones or other underserved communities.
- The degree to which the submission enables new and expanding market segments
- Whether the project promotes increased coordination with nongovernmental entities for the demonstration of technologies and research applications to facilitate technology transfer.



## 15. DEFINITIONS

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

**Connector or Connector Organization** means an entity that seeks to support the efforts of the competitors. These must be U.S.-based organizations that have the capacity to connect competitors to mentoring, business resources, and/or manufacturing resources, or introduce them to possible sources of funding. This definition is intentionally broad so that many different types of entities are able to participate. Connectors will be earning recognition rewards based upon their support of the competitors. Further details can be found at: <https://americanmadechallenges.org/network.html>.

**Power Connector** means a subset of Connectors that receive contracts from the Alliance for Sustainable Energy to play a more substantial role in the competition and receive funds to expand and amplify the American-Made Challenges: Solar Prize Hardware Track. Not only will these stakeholders work to identify talent and support participants in the Ready!, Set!, and Go! Contests, they will partner with NREL to envision and execute a long-term sustainable strategy for scaling the American-Made Challenges.

**Voucher Funding** – Vouchers are part of the Prizes for the Set! and Go! Contests. In the case of a national laboratory, the funds will be provided directly to the laboratory on behalf of the winner to conduct a mutually agreed upon scope of work between the laboratory and the winner. When vouchers are used at a non-national laboratory facility, the winners will be reimbursed after the voucher work is complete. For further information, please see: <https://americanmadechallenges.org/solarprize/connect.html#vouchers>.

## VI. APPENDIX 2: FOREIGN WORK REQUIREMENT

### Waiver

If an entity seeking to compete does not have majority domestic ownership and control, the Office of Energy Efficiency and Renewable Energy (EERE) may consider issuing a waiver of that eligibility requirement where (1) the entity submits a compelling justification; (2) the entity is incorporated in and maintains a primary place of business in the United States; and (3) the entity otherwise meets the eligibility requirements. EERE will not waive the eligibility requirement that all competing entities must be incorporated in and maintain a primary place of business in the United States. Entities seeking a waiver should include a justification along with their submission. EERE may require additional information before making a determination on the waiver request. There are no rights to appeal DOE's decision on the waiver request.

The justification must address the following waiver criteria and content requirements:

### Waiver Criteria

Entities seeking a waiver must demonstrate to the satisfaction of EERE that its participation: (1) has a high likelihood of furthering the objectives of this Prize competition and (2) aligns with the best interest of the U.S. industry and U.S. economic development.

### Content for Waiver Request

A waiver request must include the following information:

1. Entity's name and place of incorporation
2. The location of the entity's primary place of business
3. A statement describing the extent to which the entity is owned or controlled by a foreign government, agency, firm, corporation, or person who is not a citizen or permanent resident of the United States, including the applicable percentage of ownership/control
4. A compelling justification that addresses the waiver criteria stated above
5. A description of the project's anticipated contributions to the U.S. economy
6. A description of how the entity has benefitted U.S. research, development, and manufacturing, including contributions to employment in the United States and growth in new U.S. markets and jobs
7. A description of how the entity has promoted domestic manufacturing of products and/or services.

**This is the end of the rules document, thank you for reading.**