



U.S. DEPARTMENT OF ENERGY

**American-Made**

**NETWORK SUMMARY**

# 1. INTRODUCTION

The U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy (EERE), in partnership with the National Renewable Energy Laboratory (NREL), is launching the American-Made Solar Prize (Solar Prize). The Solar Prize is a new program that is designed to strengthen and scale critical connections that accelerate and sustain American innovation through two interrelated tracks: prize competitions, and the establishment of the American-Made Network- an effort to bring together diverse resources to support competitors and the community participating in the Solar Prize.

The Solar Prize will spur innovation by addressing tough problems facing the solar energy sector broadly through a series of three progressive competitions that will incentivize the nation's innovators and entrepreneurs to rapidly discover, research, iterate, and deliver new solutions to market that will expand solar manufacturing in the United States. This new, scalable approach to rapid product development not only provides cash prizes, but also activates America's energy incubators, investors, universities, 17 national laboratories, and others to help participants achieve their goals. This approach is designed to be flexible, scalable, and to include diverse resources extending beyond solar to other technology domains and sectors. This will simultaneously enable the rapid development of technology while building connections that support commercialization.

# 2. PURPOSE

To create a network of innovators, technical experts, solar industry professionals, facilities, laboratory experts, incubators, accelerators, and investment partners that will:

- Generate excitement for and participation in the Solar Prize
- Connect entrepreneurs to resources and investors
- Create a sustainable and innovative ecosystem of resources to support competitors in the Contests and others seeking to bring innovation to the solar industry
- Enhance ideas via a crowdsourced approach
- Accelerate product development and prototyping
- Develop, validate and test solutions that meet consumer and industry needs
- Build new businesses and capabilities
- Advance the solar industry and marketplace

### 3. AMERICAN-MADE NETWORK PARTNERS

**Prize and Network Administrator: The National Renewable Energy Laboratory:** The DOE has partnered with the National Renewable Energy Laboratory (NREL) to administer the American-Made Solar Prize. NREL will help competitors locate and leverage the vast array of national lab resources and administer prizes, contracts and vouchers. NREL will bring the competitors and the other elements of the American-Made Network together.

**Crowdsourced Community Ideation Platform:** Through an easily accessible and publicly available online platform, anyone can participate in ideation by submitting a consumer and/or industry-relevant problem and/or possible solution. The platform engages people with diverse experiences, skills, and perspectives including: stakeholders, members of related fields, energy industry and other experts to bring new ideas to light. The community can share feedback by commenting on postings. Competitors, Connectors, and potential partners are encouraged to track posted problems and devise solutions in preparation for the Ready! Contest. Potential competitors can use the platform to explore and refine existing ideas or submit their own to ideation and/or the Ready! contest. Visit the Ideation Page (<https://americanmadechallenges.org/ideation.html>) to learn more and begin sharing ideas.

**Connectors:** Connectors are entities that help Competitors navigate the innovation process, and identify, recruit, and support contest participants. Connectors that are successful in helping competitors win any of the Solar Prize Contests will earn Performance Payments. Connectors can be incubators, universities, think tanks, industry groups or any other enabling entity seeking to help competitors win by performing support activities such as:

- Helping competitors refine their innovations, develop business plans, work with mentors, and connect with investors and industry partners;
- Assisting competitors in the preparation of their Submission Package to the Prize Contests;
- Raising non-federal 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 development, prototyping, validation, testing or manufacturing tools, facilities, and expertise.

Connectors who support participants that go on to win any of the Ready! Set! or Go! Contests earn payments outlined in the table below. Entities interested in participating as a Connector can visit the following site to sign up and apply at: <https://americanmadechallenges.org/connect.html>.

## Connector and Power Connector Performance Payment Opportunities:

Performance Payment Name	Anticipated Number of Awards	Dollar Amounts	Details
<b>Engage</b>	Up to 25	\$25,000 pool	Distributed to Connectors who engage with potential participants through targeted outreach and events leading up to the Ready! Contest submission deadline. Individual \$1,000 payments will be distributed to Connectors that sponsor events that meet the criteria below.
<b>Recruit</b>	Up to 40	\$100,000 pool	Distributed to Connectors for recruiting and supporting competitors that go on to win the Ready! Contest.
<b>Mentor</b>	Up to 12	\$70,000 pool	Distributed to Connectors that mentor competitors and facilitate partnership agreements of Set! Contest and Go! Contest winners.
<b>Boost</b>	3	\$200,000 pool	Distributed proportionately to the top three Connectors that boost the programs impact and teams access to resources by raising the most private capital in support of the program.

**Engage** – Payments to increase engagement for the Solar Prize through targeted outreach and events leading up to the Ready! Contest. Connectors can begin engaging with the community via local events, jamathons, or other public events that are geared toward informing the public, generating ideas, and increasing community excitement and participation now. Events should be open to anyone, broadly available (1 per connector, 1 per city and up to 3 per state), attended by at least 30 people, and focused on the Solar Prize.

**Recruit** – Payments to recruit and support new competitors in the Ready! contest by building teams, supporting submission package creation and making new connections. To receive a payment, a Connector or Power Connector recruits new participants to compete and win. Payment will be issued if a recruited competitor wins one of the 20-40 Ready! Contest prizes.

**Mentor** – Payments to successfully help teams navigate the innovation process and progress from winning the Ready! Contest to winning the Set! and or Go! Contests. Those who mentor competitors who win the Set! Contest or facilitate partnership agreements for winners of the Go! Contest they will receive a performance payment for successfully supporting the winning Competitors.

**Boost** – Payments to help boost financial support for the teams individually or the Solar Prize generally. This includes facilitating access to private capital to help entrepreneurs thrive and securing funding for the long-term benefit of teams or the Solar Prize. Connectors and Power

Connectors are also encouraged to fundraise in an effort to expand their capabilities and resources. The top three Connectors in raising capital related to the Solar Prize can earn payment from a pool of \$200,000

**Power Connectors:** Connectors may apply to play a more substantial role in the competition and receive funds to expand and amplify DOE and NREL's efforts. Each selected Power Connector (up to 5) will be eligible to receive a contract with NREL valued at up to \$100,000 with a supplemental \$25,000 if selected to host one of two national demo days. Not only will these Power Connectors work to build the network and community, 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 Contests. Power Connectors will earn payment for efforts that:

- Increase the number of new, high-quality competitors;
- Expand the network of partners, resources, and tools;
- Increase and diversify funding sources;
- Produce engaging and well-attended national demo day showcases;
- Expand the scope of manufacturing and technological challenges addressed by the program;
- Deliver repeated support of contests through an increasingly robust American-Made Network and expanded funding from non-governmental sources.

Power connectors are eligible to earn both Power Connector and Connector Payments as described above. Learn more and apply to become a Power Connectors at <https://americanmadechallenges.org/connect.html>.

**Vouchers used at National Laboratories and Facilities:** Vouchers will provide competitors access to tools and expertise from national labs or qualified facilities. Competitors can win up to \$150,000 in vouchers, which can be used to develop, test, and validate solutions. Voucher facilities provide competitors with:

- Access to hardware and software development tools
- Access to national laboratory, university, and private laboratories
- Expert networks and platforms for coders, designers, and others
- Specialized facilities with additive, digital, small batch and other manufacturing support
- Other testing and validation capabilities.

Set! and Go! Contest winners will be awarded vouchers that enable teams to work with national laboratories and facilities in an effort to advance the development of new and productive relationships that can rapidly produce, develop, test and/or validate solutions and product prototypes. Each winning team, from the Set! and Go! Contests will qualify to receive Vouchers:

### **Set! Vouchers**

- In the amount of: \$375,000/(# of Set! contest winners) to each Set! Prize winning team
- 2/3rds of Set! Vouchers are eligible to be spent at a national laboratory
- 1/3rd of Set! Vouchers are eligible to be spent at a national laboratory OR any other qualified fabrication, prototyping, manufacturing, or similar facility

### **Go! Vouchers**

- In the amount of \$75,000 to each Go! Prize winning team
- 2/3rds of Set! Vouchers are eligible to be spent at a national laboratory
- 1/3rd of Set! Vouchers are eligible to be spent at a national laboratory OR any other qualified fabrication, prototyping, manufacturing, or similar facility

### **Voucher Matching Process**

1. **Initiate** – Competitors submit descriptions of technical challenges through a 2-page Technical Assistance Requests (TAR) included in Ready! and Set! Contest submission packages
2. **Publish** – The Prize Administrators releases the TARs of Ready Contest Winners to National Labs, qualified facilities and the public.
3. **Match** – Voucher Service Providers (VSPs) and Ready! Contest winners contact each other, exchange ideas, and discuss scope and outcomes for using voucher funds.
4. **Propose & Initiate** – Competitors, based on discussions with voucher service providers, submit voucher work slides as part of the Set! Contest submission package Competitors also submit an updated TAR to seek additional VSPs technical challenges they need help with after the Go! Contest.
5. **Win & Perform** – Winners of the Set! Contest negotiate a Voucher Scope of Work (Voucher SOW) and confirm NREL. Labs and qualified facilities perform the work and get compensated.
6. **Match II** – Voucher Service Providers and Set! Contest winners contact each other, exchange ideas, and discuss scope and outcomes based on an updated TAR.

7. **Propose II** – Competitors, based on discussions with voucher service providers, submit voucher work slides as part of the Go! Contest submission package.
8. **Win & Perform** – Winners of the Go! Contest negotiate updated and/or new Voucher Scopes of and confirming with NREL. Perform the work and get compensated.
9. **Use it or Lose it** – Voucher funds expire one year after Go! Contest Demo Day.

Competitors may use vouchers at multiple labs and facilities and may add additional funds (Prize, personal or raised capital) to supplement Voucher payments. To be eligible for Voucher reimbursement, Voucher SOWs must be submitted to NREL for DOE review and approval for relevance and cost reasonableness. Eligible cost categories are: personnel, equipment fees, materials, supplies and government-rate travel to and from a facility

**Other Partners:** Additional entities interested in assisting teams and/or supporting or investing in the Solar Prize can join as a partner at <https://americanmadechallenges.org/connect.html>. Network support activities may include: increasing future participation, creating public/private partnerships, raising funding that will go to helping teams directly, and developing private funding streams that will help sustain the Solar Prize into the future. Tell us how you can help the Solar Prize by joining as a partner on the Connect Page (<https://americanmadechallenges.org/network.html>).