SolarAPP+ Prize

Informational Webinar
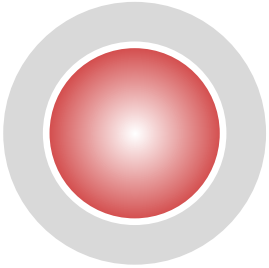
September 2022

SolarAPP+ | AMERICAN MADE SOLAR PRIZE — U.S. DEPARTMENT OF ENERGY

Housekeeping

This webinar is being recorded and will be made available later.

Questions

There will be a Q&A session at the end of the presentation

- To submit a question, type it into the "Q&A Box"

Technical Issues

If you experience technical issues, **please check your audio settings under the "Audio" tab**

- A recording will be posted following the webinar

Solar APP+

AMERICAN MADE SOLAR PRIZE

U.S. DEPARTMENT OF ENERGY

Overview of American-Made Challenges and Network

Your **fast track** to the clean energy revolution.

AMERICAN MADE
U.S. DEPARTMENT OF ENERGY

supercharge

A REVOLUTION OF **BOLD IDEAS**

Fast track your ideas for the clean energy revolution

$100M in cash prizes and support

30+ prizes

250+ Network members

AMERICAN MADE
U.S. DEPARTMENT OF ENERGY

SolarAPP+ Background and Introduction

About SolarAPP+

The Solar Automated Permitting Process Plus (SolarAPP+) was developed by the National Renewable Energy Laboratory (NREL) in collaboration with local governments, code development organizations, and industry stakeholders—and enables instant online permitting for code-compliant residential PV systems.

SolarAPP+ is an online portal through which PV contractors can upload system specifications, have those specifications automatically reviewed for code compliance, and receive instant approval for code-compliant systems. Contractors also receive an inspection checklist to verify installation practices and adherence to approved designs. SolarAPP+ is available to authorities having jurisdiction (AHJs) at no cost.

RESOURCES

www.americanmadechallenges.org/challenges/solarapp
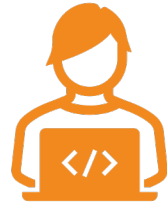
www.herox.com/SolarApp

SolarAPP-Performance-Review

Email: team@solar-app.org

SolarAPP+ Supports Eligible PV and Storage Systems

SolarAPP+

Residential PV
Residential rooftop PV projects with one module and one inverter type are common and easy to approve. SolarAPP+ can cover 70%–80% of the permits submitted for solar and approve them without delay.
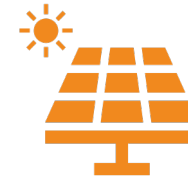
Online Access
SolarAPP+ works through a no-touch process, allows for 24/7 instant permitting, and runs code compliance checks.

Building Codes
SolarAPP+ is compatible with the 2017 and 2020 NEC and the 2018 and 2021 IBC and IRC. In California, SolarAPP+ is compliant with Title 24.

Updates
SolarAPP+ will be updated to address the newest code cycles and features as they become available.

Locations
25+ jurisdictions have fully adopted SolarAPP+. Many more are in the onboarding process.

Shorter Project Timelines

- A typical SolarAPP+ project is permitted, installed, and inspected about 13 days sooner than projects using a traditional permitting process.
- We estimate that SolarAPP+ eliminated 50,000+ days of permitting delay

Staff Time Savings

- SolarAPP+ has saved 10,000+ hours of jurisdiction staff time through automated permit reviews.

No Negative Impact on Inspections

- SolarAPP+ projects appear to fail inspection at similar rates to traditional projects.
- NREL suspects that SolarAPP+ inspection failures could be reduced as contractors and inspectors get more familiar with the process.

SolarAPP+ Prize Structure

A Prize Structured for Success

- 8 months
- $15,000 cash awards
- **$1 million** prize purse.

SolarAPP+

SolarAPP+ Prize

AMERICAN MADE SOLAR PRIZE

U.S. DEPARTMENT OF ENERGY

Step 1

Submission
- Participants demonstrate their interest in piloting SolarAPP+.
- Eligible competitors will be selected to move to Step 2.

Step 2

SolarAPP+ Adoption
- Competitors that submit proof of successful SolarAPP+ pilot will receive a $15,000 cash prize.

Step 1—Submission Overview

- Determines which competitors will be allowed to move to Step 2.

- Eligible AHJs submit application elements via HeroX that demonstrate their interest in piloting SolarAPP+. Submission elements include a questionnaire and letter of support.

- If you intend to compete, be sure to **read the SolarAPP+ Prize Rules document at this URL:**

  https://americanmadechallenges.org/challenges/solarapp/docs/SolarAPP+_Official_Prize_Rules.pdf

Step 1 Selectees

- Any eligible AHJ can apply—by Nov. 4, 2022.

- Selected winners will be allowed to move to Step 2.

Step 2—SolarAPP+ Adoption Overview

- Determines which competitors will receive a prize.

- Competitors submit proof of SolarAPP+ pilot through HeroX that demonstrate their SolarAPP+ pilot has begun by the final submission deadline—April 27, 2023.

- If you intend to compete, be sure to **read the SolarAPP+ Prize Rules document at this URL:**

  https://americanmadechallenges.org/challenges/solar/docs/rules/
  SolarAPP+_Prize_Official_Rules.pdf

Step 2 Contest Prizes

- Each winner receives $15,000.

- $1,000,000 available in cash prizes.

- Only 1 prize awarded per competitor.

SolarAPP+ Prize Step 1

Step 1—Submission Timeline

1. Create HeroX Account

Eligible competitors must create an account on HeroX at: https://www.herox.com/solarapp.

2. Submission

There are two submission elements required: A questionnaire and letter of support.

3. Evaluation

Prize Administrator screens submissions and reviewers independently score the content of each submission.
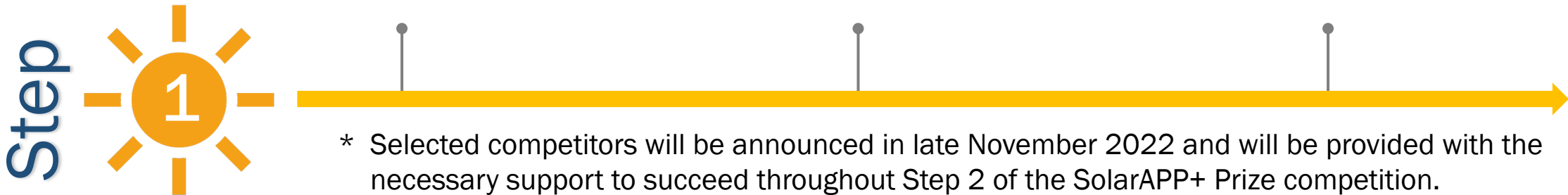
September 12, 2022
Program announced and registration opens

November 4, 2022
Application submission deadline—3 p.m. ET

Late November 2022*
Eligible competitors announced

Step 1

* Selected competitors will be announced in late November 2022 and will be provided with the necessary support to succeed throughout Step 2 of the SolarAPP+ Prize competition.

Step 1—Submission Scoring Goals

1. **Solar volume:** Calculate how many permits for rooftop solar are processed annually—and how much time this process takes.

2. **Code eligibility:** Show that your jurisdiction uses or will use codes that are compatible with SolarAPP+.

3. **Demonstrated need:** Prove that the adoption of SolarAPP+ will improve your current permitting process—and in what way(s).

4. **Geographic diversity:** Identify the geographic diversity of your jurisdiction.

5. **Diversity, equity, and inclusion (DEI):** Explain the impacts that adoption of SolarAPP+ will have on the DEI of your jurisdiction.

6. **Other factors as deemed appropriate:** The evaluation team may identify other factors for consideration before or during the SolarAPP+ Prize process.

SolarAPP+ Prize Step 2

Step 2—Adoption Timeline
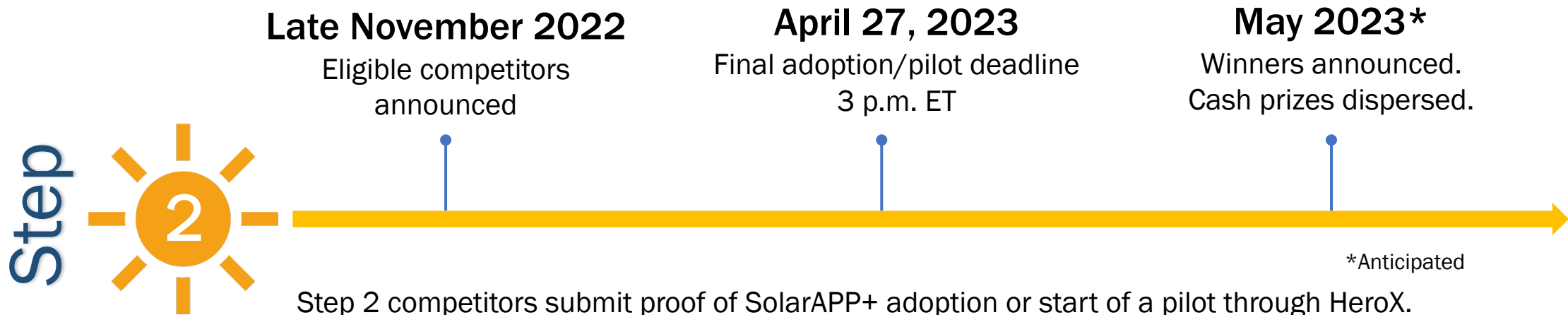
1. Pilot SolarAPP+
AHJs have 4 months to begin a SolarAPP+ pilot to win a SolarAPP+ Prize.

2. Proof of Pilot Submission
AHJs must provide a webpage, public announcement, proof of registration, and proof of instant workflow.

3. Evaluation
Prize team will evaluate each competitor's proof of pilot based on completeness and accuracy.

Late November 2022
Eligible competitors announced

April 27, 2023
Final adoption/pilot deadline 3 p.m. ET

May 2023*
Winners announced. Cash prizes dispersed.

Step

2

*Anticipated

Step 2 competitors submit proof of SolarAPP+ adoption or start of a pilot through HeroX.

Step 2—SolarAPP+ Adoption Scoring Goals

1. **Accuracy of information provided:** Submitted information will be cross-checked for accuracy to prove that SolarAPP+ has been activated within a jurisdiction.

2. **Clarity and accessibility of public-facing information submitted:** Public-facing resources will be reviewed, and factors like accessibility and clarity may be considered.

3. **Other factors as deemed appropriate:** Other factors may arise, depending on a jurisdiction's unique circumstances.

Step 2 Contest Prizes

- Up to $1,000,000 in cash prizes
- $15,000 per winner
- One award per applicant

Note: Your submission from Step 1 must be selected to compete in Step 2

HeroX Submission Materials

HeroX Submission Materials

- ## Step 1—Submission

  - Questionnaire

  - Letters of Commitment or Support

- ## Step 2—SolarAPP+ Pilot

  - Webpage

  - Public announcement

  - Proof of registration

  - Proof of instant workflow

SolarAPP+ Submission

Questionnaire

The questionnaire consists of 14 questions covering background information related to the AHJ's current permitting processes and permit volume.

Evidence of Support

This is a letter of support or intent that demonstrates commitment from the permitting authority at the AHJ to pilot SolarAPP+.

SolarAPP+ Pilot

Webpage

- Paste a hyperlink that directs to a webpage that guides installers through the process of using SolarAPP+ within the AHJ.

Public Announcement

- Attach a press release or other public announcement from the AHJ that advertises a SolarAPP+ pilot or launch of the program.

Proof of Registration

- Evidence that registration is complete within the SolarAPP+ platform, as verified by the SolarAPP+ team.

Proof of Instant Workflow

- Submit a PDF in HeroX that contains screenshots of the online permitting workflow for SolarAPP+ projects.
- Screenshots should demonstrate the workflow process and must include proof of job card and inspection scheduling, among other components.

Scoring and Important Dates

Step 1—Submission—Scoring Criteria

Expert reviewers give a score of 1 to 3 for each statement

Solar Permit Volume

- The competitor shows significant solar permitting volume or opportunities for growth that SolarAPP+ could help address (expected solar volume >60 permits per year by 2024).

- The competitor has provided evidence that three or more contractors apply for permits annually within the AHJ.

Code Eligibility

- The competitor shows that they are code-compatible or will be compatible with SolarAPP+ during the prize period (NEC 2017, NEC 2020, IRC 2018, IRC 2021, IBC 2018, IBC 2021).

- The competitor has not adopted local amendments to the model codes that they have implemented, such that minimal or no modifications to SolarAPP+ would be required.

- If the AHJ has adopted a local amendment to the model codes, they have demonstrated the public health and safety justification associated with the amendment (AHJs without local amendments to the model code receive full score on this subcriterion).

Adoption Pathway

- The competitor identifies a SolarAPP+ adoption pathway that could be feasible to implement (either the integrated or standalone adoption pathway).

Step 1—Submission—Scoring Criteria

Expert reviewers give a score of 1 to 3 for each statement

Demonstrated Need

- The competitor shows that SolarAPP+ could reduce their solar permit workload and/or expand the AHJ's capability for solar plan review.

Risk Assessment

- The competitor shows a strong understanding of the risks to adopting SolarAPP+ in their AHJ and how to navigate those during the prize period.

Diversity, Equity, and Inclusion (DEI)

- The competitor demonstrates a compelling justification for how SolarAPP+ can support their DEI priorities, such as increasing low- and moderate-income solar adoption in disadvantaged communities within the AHJ and/or economic development within those areas.

Letter of Support

- The letter demonstrates that the permitting department and other relevant decision makers are in support of adopting SolarAPP+.

Step 2—Final Submission—Maximum Points

Expert reviewers give a score of Pass/Fail for each of the required submission items:

Webpage (Pass/Fail)

- The information provided on the webpage is accurate, clear, and accessible to the public.

Public Announcement (Pass/Fail)

- The AHJ competitor has publicly released an announcement describing the adoption of SolarAPP+.

Proof of Registration (Pass/Fail)

- The AHJ competitor has completed registered on the SolarAPP+ website and has a verified username, date of registration, and name of AHJ.

Proof of Instant Workflow (Pass/Fail)

- Submitted materials clearly demonstrate the workflow process. The permit workflow must show the process for a contractor to start a permit and track it through permit job card issuance. The permit job card must be automatically generated without human review, after permit fees are automatically invoiced and payment is confirmed within the software. The AHJ must also show how the contractor can schedule inspection.

How We Score—HeroX Package

- All items in the application will be considered when scoring each submission.

- After reviewing all elements of the submission package, expert reviewers will assign a score between 1 and 3 for each of the scoring criteria.

1	2	3
Disagree	Neutral	Agree

- Expert reviewers will score submissions based on the judging criteria—and judges will sign a nondisclosure agreement.

- The final score from an individual expert reviewer for a submission package equals the total sum of the scores for all the criteria.

- All expert reviewers' scores will then be averaged for a final score for the submission package.

Scoring Process

Scoring of the SolarAPP+ Prize submissions—both Step 1 (Submission) and Step 2 (Proof of Adoption)—will proceed as follows:

1. Expert reviewers read, score, and comment on each submission. Each question listed in the questionnaire is reviewed and given equal weight. 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 competition or have a familial or financial relationship with an individual who is a registered competitor.

2. The SolarAPP+ Prize Administrator, at its sole discretion, may decide to hold a short interview with the competitors. Any interviews will be held prior to the announcement of winners and would serve to help clarify questions the reviewers may have. Attending interviews is not required, and interviews are not an indication of winning.

3. The judges' final determination of winners will consider reviewer scores and the program policy factors listed in Appendix 1. NREL will conduct the review, and the Solar Energy Technologies Office (SETO) is the judge and final decision maker and may elect to award all, none, or some of the submissions accepted.

Let's Get Started!

SolarAPP+

01
Prepare!
Create a HeroX account AND
Read the rules!

02
Complete your Step 1 Submission
No later than Nov. 4, 2022, 3 p.m. ET

03
Eligible competitors are announced, and Step 2 begins
Late November 2022

04
Submit Step 2— pilot package
No later than Apr. 27, 2023, 3 p.m. ET

05
Prize winners are announced
May 2023

Important Dates

Step 1

Date	Event
September 12, 2022	Program announced and registration opens
September 27, 2022	SolarAPP+ Prize informational webinar
November 4, 2022	Step 1--Submission closes at 3 p.m. ET
Late November 2022	Eligible competitors announced

Step 2

Date	Event
Late November 2022	Begin implementing SolarAPP+
April 27, 2023	Step 2—Adoption/Pilot completion deadline
May 2023	Winners/awards announced

HeroX Live Demo

Get Started With the SolarAPP+ Prize Today!

1. Create an account and follow on HeroX
   https://www.herox.com/SolarApp

2. Read the rules
   https://americanmadechallenges.org/challenges/solarapp/docs/SolarAPP+_Official_Prize_Rules.pdf

3. Submit your application by Nov. 4, 2022
   https://www.herox.com/solarapp

4. Should you have questions, you can reach out to us at jeff.cook@nrel.gov; Emily.evans@nrel.gov.

Q&A & Thank You

Webinar recording will be made available on
herox.com/solarapp

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