



SolarAPP+
The Emerging US Permitting Solution













































SolarAPP+ is a standardized plan review software that can run compliance checks and process building permit approvals for eligible rooftop solar systems.

The tool was developed through a collaborative effort to accelerate rooftop solar adoption by making it easier for local governments to quickly and safely approve rooftop PV projects for installation

SolarAPP+ Eligibility

SolarAPP+ can cover standardized systems as defined <u>here</u>.

Current Support Parameters

- Residential PV
- Approved equipment
- NEC 2017 & 2020
- 2018 & 2021 i-Codes
- Bus < 225A
- Service <400A

Support In Progress

Residential storage

- PV systems <4PSF
- Single phase utility supply
- No wood shake roofs
- No metal roofs w >15PSF snow load
- Main panel upgrades
- California's Title 24



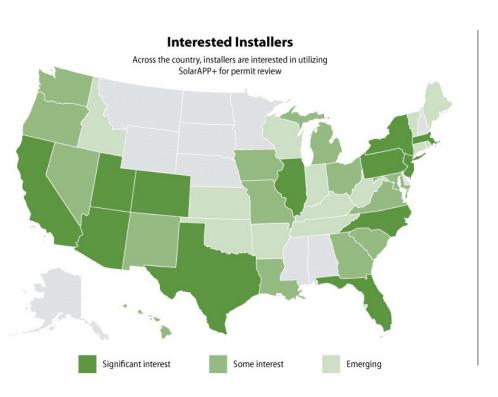
Add-ons for existing systems

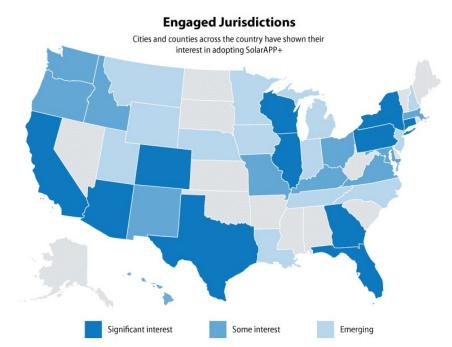
Planned

EV chargers, electric appliances, roof tiles, and more...



Interest in SolarAPP+





Tucson's Experience with SolarAPP+



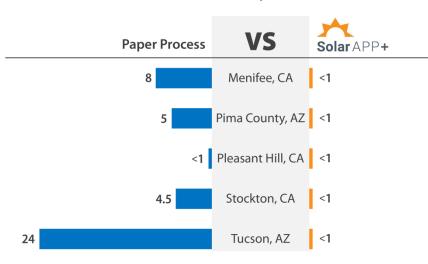
- 2,400 PV permits issued to date
- 14,200+ kW approved via SolarAPP+
- Over 2,400 hours of staff time saved in plan review
- Piloting PV+ storage

"The permitting process was taking four weeks. Now with SolarAPP+ we give a permit the same day. We just approved about 450 installations in the last 60 days alone."

- Tucson Mayor Regina Romero

SolarAPP+ Pilot **Statistics**

Median Business Days for Permit Review





10.000+

Residential rooftop PV permits approved to date, including 1,500+ revisions

600 +

Permits approved to date for Solar+Storage projects



By providing instantaneous review SolarAPP+ has reduced the average permit review time to

less than 1 day

saving jurisdictional staff over **10,000 hours** in review

No time added

to inspections of PV systems in the field, with comparable inspection passage rates to traditional inspections



Projects submitted through SolarAPP+ were installed and inspected

12 days faster

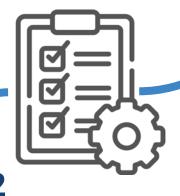
on average than projects using the traditional process

SolarAPP+ Flow

Installer submits an application with design specifications through SolarAPP

1





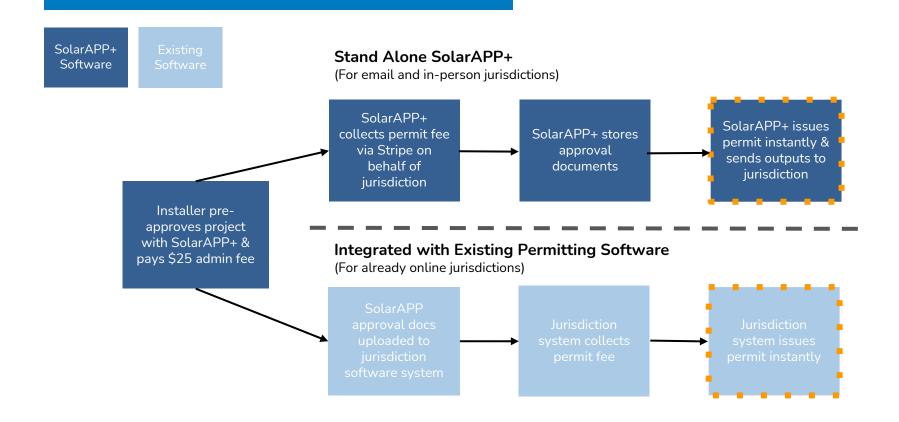
SolarAPP checks the application to ensure the system design is code compliant



Code compliant applications are issued a permit instantly after fee payment

(Review sample approval docs here)

Adoption Options



Four Steps to Adopting SolarAPP+



Select the Right Integration



Input Local Settings



Setup Instant Permit Workflow



Launch

SolarAPP can be set up to:

- integrate with your existing online permitting software
- stand alone as a complete online permitting solution

These include:

- Permitting contacts
- AHJ boundaries
- Local wind and snow variables
- Model code years
- Terms and conditions

Depending on your integration, either:

- Set up an instant permit application in your software
- Set up permit payments in SolarAPP

This involves:

- Inviting 1-3 installers to use your SolarAPP permitting process
- Opening up SolarAPP+ permitting to all installers

CalAPP Grant

The California Automated Permit Process Program (CalAPP) is a \$20 million funding program that provides grants to cities and counties to help implement SolarAPP+

CalAPP will be available in ~June 2022

Proposed Grant Sizes:

- Population <50,000: Up to \$40K
- Population 50,000-99,999: Up to \$60K
- Population 100,000-200,000: Up to \$80K
- Population >200,000: \$100K

Grant Can Cover:

- IT staff time on adoption
- Inspector time on training
- Time spent meeting with NREL
- And more



For more information visit: https://www.energy.ca.gov/programs-andtopics/programs/california-automated-permit-processing-program-calapp

SolarAPP+ Prize

The SolarAPP+ Prize is a \$1 million funding program that provides grants to cities and counties to help implement SolarAPP+. Jurisdictions can win \$15,000 to be allocated to the costs below.

The SolarAPP+ Prize Application closes on **November 4th!**

Grant Can Cover:

- IT staff time on adoption
- Inspector time on training
- Time spent meeting with NREL
- And more!

For more information visit: https://americanmadechallenges.org/solarapp

Make sure to review the SolarAPP+ Prize Rules:

https://americanmadechallenges.org/challenges/solarapp/docs/SolarAPP+ Official Prize Rules.pdf

Questions?

APPENDIX

More information:

SolarAPP Outreach Materials

- Website:
 - https://solarapp.nrel.gov/
- Pilot Results:
 - https://www.nrel.gov/docs/fy22osti/81603.pdf
- Demonstration webinar:
 - https://www.youtube.com/watch?v=XmXLvQevPEs
- Where is SolarAPP+ available?
 - https://help.solar-app.org/article/108-where-is-solarapp-available.
- Piloting webinar:
 - https://youtu.be/iaocESF9Ilg.
- SolarAPP Benefits Memo:
 - https://solarapp.nrel.gov/docs/SolarAPP Benefits Memo.pdf
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