Photo by NREL 22167

Benefits of the SolarAPP+ Online Permitting Software

Your jurisdiction can instantly issue permits for code-compliant, residential solar systems

Solar Automated Permit Processing Plus (SolarAPP+) is a free, online platform for local governments that standardizes and automates the solar permitting process to ensure code compliance and promote safety.

SolarAPP+ is available to authorities having jurisdiction (AHJs) at no cost, supported by administrative fees paid by solar installers.

What SolarAPP+ Can Do for Your Jurisdiction

- Automate your solar permitting plan review process
- Deliver instant permits to code-compliant residential PV systems
- Save plan review time for your permitting staff, allowing them to focus on more complex applications
- Promote safety through consistent enforcement of building and electrical codes
- Make solar energy more accessible to homeowners in your community

- Be customized to fit your community's needs and conditions
- Help accelerate solar adoption nationwide.

How SolarAPP+ Improves Your Permitting Process

Most residential solar systems—about 70% to 80% of permits submitted—are simple and standardized, but the sheer volume of applications can be time-consuming and resource-intensive for your permitting department.

SolarAPP+ helps make permit department workloads manageable and improves customer service by:

- Automatically checking residential solar and storage system designs for safety and code compliance
- Using standardized compliance checks to catch typos and other errors—returning corrections to the applicant instantly
- Approving permits for eligible PV systems, while other systems go through a typical permitting review
- Producing a project specific checklist to aid the inspection team in validating code compliance
- Keeping up to date with relevant codes and certifications as new editions and technologies are adopted—reducing the need to constantly retrain staff on new codes.

How SolarAPP+ Works

Piloting and adopting SolarAPP+ is easy. Installers pay a small administrative fee per project to support SolarAPP+ updates and long-term availability. Onboarding is supported by NREL and Underwriter Laboratories (UL)—and is customized to suit your jurisdiction's unique needs. The software will always be offered to AHJs at no cost to use for plan review, approval, and fee payments.

You can use SolarAPP+ as a stand-alone product or integrate it with existing software and inspection platforms. Today, SolarAPP+ can permit solar and solar-and-storage systems. In the future, SolarAPP+ will incorporate other technologies, such as electric vehicle charging equipment and other smart home technologies.

SolarAPP+'s Proven Performance

The National Renewable Energy Lab tracks the performance and impact of SolarAPP+ each year. In 2023, SolarAPP+ provided these benefits.

- Staff time savings: SolarAPP+ saved approximately 15,400 hours of permitting department staff time.
- Fewer permitting-related delays: SolarAPP+ eliminated over 150,000 business days in permitting-related delays.
- Increased platform adoption rates: 97 local governments had publicly launched the SolarAPP+ platform by the end of 2023, and 70 more were in the piloting stage. Another 149 were testing SolarAPP+ or were in the onboarding phase.

When rooftop PV installation hurdles are simplified, homeowners are happier and growth compounds—and local governments benefit from greater resilience, flexibility, and economic development.

How To Get Started With SolarAPP+

To learn more and start piloting SolarAPP+ in your jurisdiction, view our 5 Steps to SolarAPP+ Adoption fact sheet or register at solarapp.nrel.gov/register.

SolarAPP+ can be customized to meet a community's needs, including:

- Fire Bulletin Appendix
- Allow Main Panel Upgrades
- Allow Main Breaker Derates
- Enable electrical diagrams
- Block addresses for permitting
- Allow for local ordinances.

List of AHJs Using SolarAPP+

At the end of 2023, there were 167 communities across 12 states using SolarAPP+. See the latest status of SolarAPP+ adoption, at: https://help.solar-app.org/article/108-where-is-solarapp-available

SolarAPP+ is in use by communities in Arizona, California, Colorado, Connecticut, Illinois, Iowa, Maryland, Oklahoma, Texas, Virginia, and Washington.

What Communities Are Saying About SolarAPP+

"The process the SolarAPP+ gives us on the inspection sheet is quite intensive and it's great. Our inspectors love it and all the contractors that are using it, are doing better inspections. They are passing a lot better. They are making sure that everything is grounded like it's supposed to be.

—*Kimberly Norman-Rosedam, CBO, Town of Guilford, CT*

"We're looking at a 50% reduction in the solar permits that we have to touch and process."

—*Carla Blackwell, director of Pima County, AZ Development Services*

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