Solar Automated Permit Processing (SolarAPP+) Benefits

NREL has built advanced, no-cost permitting software

The SolarAPP+ is a collaborative effort to foster rooftop solar adoption by making it easier for local governments to quickly and safely approve standardized rooftop projects for installation via NREL's new, no-cost permitting software. The project is motivated by national data showing that local governments with instant online permitting for rooftop solar process 5-14x more volume than jurisdictions with traditional permit processing.

The National Renewable Energy Laboratory (NREL) has been working with an all-star team of experts to build an online permitting platform that will automate rooftop solar plan review and produce compliant approvals instantly. Our team includes local governments, the building safety community, solar industry leaders, environmental organizations.. and you! See our full list of partners at **solarapp.nrel.gov**

Automated permitting unleashes growth

Most residential solar systems are simple and standardized, like HVAC installations, but the sheer volume of applications can also be time and resource consuming for permitting departments. SolarAPP+ helps make this workload manageable.

SolarAPP+ functionality:
- Allows permit departments to collect the same permit fees, while also opening the door to market growth
- Uses standardized compliance checks to catch typos, and errors; returning corrections to the applicant instantly
- Eligible, cookie-cutter rooftop solar applications get approved permits to build instantly, while ineligible projects flow through a typical permitting review. Stale applications never require action.
- Produces an inspection checklist replicating the application details for inspectors to utilize and confirm.

SolarAPP+ piloting and adopting is easy

- Stays up to date with relevant code and certifications as new editions and technologies arise
- Free for AHJs to use for plan review, approval, fee payments, and record tracking
- Installers pay small admin fees to support SolarAPP+ updates and long-term availability
- Can standalone or integrate with existing government software and inspection platforms
- Reduces the need to constantly retrain staff on new codes and instead rely on the SolarAPP+ guidance

Automated permitting is already popular

Online and instant permitting is common practice for many localities in the US. We built on examples from CA, AZ, NV, FL, CA, SC, TX, NY, and more. When rooftop solar installation hurdles are simplified effectively, homeowners are happier and growth compounds. In turn, local governments benefit from greater resilience, flexibility, and economic development.

> *"I was eager to work with NREL to find this new approach to handle solar permits. There has been such a good collaboration to create a different way to review these residential projects in a way that is outside the traditional plan review box but still covers the technical aspects. We're now able to move qualifying solar permits directly to field inspections, which is giving our staff much needed time to work on other, more complex projects."*
> - Geoff Simmons, Chief Building Official, Pleasant Hill (CA)

Learn more and share your contact information on solarapp.nrel.gov or by emailing solarapp@nrel.gov

How to Pilot and Adopt SolarAPP+

SolarAPP+ is free software and NREL will provide all the support local governments need to adopt. However, it will require a few meetings with your team to get you set up.

- Step 1 - SolarAPP+ technical demo and review of compliance checks with your engineering team
- Step 2 - Onboard planning and execution w building team and relevant departments, like Accounting or IT
- Step 3 - Pilot SolarAPP+ in a way that suits you
- Step 4 - Implement adoption strategy and announce new process locally
- Step 5 - Go live with SolarAPP+ and enjoy unencumbered rooftop solar growth!

SolarAPP+ Integration and Features

Standalone option for offline AHJs	Integration option for online AHJs
If your permitting department is processing and approving permits and fees in-person or by email, NREL can set up SolarAPP+ to handle it all. All you need is an email address. SolarAPP+ uses Stripe to support permit fees.	If your permitting department is processing and approving permits with an online portal, SolarAPP+ can easily be added to your system. Let us know what systems you use for fee payment and permit processing. NREL will handle the rest!

SolarAPP+ Code and Technology Support

Current	In Progress
2017 National Fire Protection Association 70 National Electrical Code (NEC) for residential PV 2018 I-Codes (International Residential Code, Fire code, and Building Code) for residential PV - CA Title 24 - State and local license verification - Inspection checklists	2017 NEC for residential storage 2020 NEC for residential PV and storage 2021 I-Codes for residential PV and storage - Main panel upgrades - Roofing integrated solar products - API integrations - Residential EV chargers

SolarAPP+ adoption is newsworthy

NREL projects are often the subject of the trade press as well as local and national news. As your partnership grows, NREL will include you in these opportunities. NREL will also track the resulting benefits of your decision to adopt SolarAPP+ which you can share with your jurisdiction's executive leadership. Your decision will not go unnoticed!

SolarAPP+ Partner Press:
- Underwriters Laboratories/UL LLC - The SolarAPP: The Emerging US Permitting Solution
- International Code Council - Industry comes together to develop solar permitting solution
- National League of Cities - Online Solar Permitting in the Age of Uncertainty
- SPUR - Streamlining residential solar installs can jumpstart a green economic recovery

"As a Solar America City, Tucson looks for ways to support the solar industry. SolarAPP provides a further incentive to use solar power by making permitting easy." -Scott Clark, Director, City of Tucson (AZ) Planning and Development Services.

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