PERMIT POWER



STATE POLICY ROADMAP

Ready to Build

A State Policy Roadmap to Save Families Money On Their Utility Bills By Streamlining Home Solar and Battery Permitting and Inspection

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How Cheap Home Solar and Batteries Can Lower Utility Bills

Families across the United States have seen their electricity bills consistently rise over the past five years.[1] The increase has been so significant that 68% of respondents in a recent poll by Consumer Reports said that their energy bills were straining the household budget.[2] Unfortunately, this upward pressure on bills is projected to continue as American families are charged for the costs of serving new data centers, building new power plants, replacing aging infrastructure, and recovering from disasters.

Home solar and batteries offer the average family the opportunity to save over $60,000 on their utility bills over the life of their system.[3] Unfortunately, these systems are out of reach for too many households. Today, it costs the average American family $36,000 to install a home solar system, which costs an Australian family $9,000.



68%

of poll respondents say energy bills are straining their household budget



$60,000

average family savings over the life of a home solar and battery system



$1trn

saved on utility bills over system lifetimes if we lower costs

The main driver of expensive home solar in the United States is unnecessary red tape: slow and inconsistent local government permitting and inspections; slow and expensive utility interconnection; and laws that effectively ban cheap plug-in solar.

Bringing down US home solar costs to levels in peer countries by cutting red tape would supercharge the ability of families to save money with home solar, enable over 18 million additional families to install almost 200GW of solar by 2040 and save $1 trillion on their utility bills over the lifetime of their systems.

The Problem of Slow and Expensive Permitting and Inspection

Today, a family needs a permit from their local government before home solar and batteries can be installed, and must pass a local government inspection before the system can be turned on. In most places across the country, this permitting and inspection process is set city by city and county by county, with each local government using its own application, paperwork, reviews, and fees. A single simple project can need approval from several departments and units of government. These slow and inconsistent local approval processes generate unnecessary costs and delays. Across the United States, 22 percent of solar projects are canceled, and installers cite the permitting process and associated delays as the top reason for cancellations.[4]

The costs and delays generated by local permitting and inspection take several main forms.



Families can wait weeks, months or even sometimes over a year for a permit for a home solar and battery system, and then wait again for an in-person inspection before they can turn their system on.[5]



Every local government asks for different paperwork and applies its own rules. Some add aesthetic, historic, or zoning reviews that have nothing to do with whether a system is safe, or require several permits and several inspections for a single system.



High and inconsistent permit and inspection fees, sometimes based on the value of the system rather than the staff time involved, add to the price families pay.



Homeowners associations block families from installing home solar, or add their own approval process and design restrictions on top of the local government's.

The cumulative effect is a system in which even the simplest and most standardized installations are slowed by a network of red tape and soft costs, putting the utility bill savings of home solar out of reach for too many families.

How to Deliver Utility Bill Savings by Cutting Permitting and Inspection Red Tape

Families should be able to get a permit for a code-compliant home solar and battery system instantly, rather than having to wait weeks, months or years. Once a system is installed, families should not have to wait around for weeks for a costly on-site inspection.

Instant Permitting & Fast Inspection

Slow permitting can add over $5,000 of cost. Waiting for an in-person inspection can delay the start of their bill savings by weeks or months and add over $1,000 of cost.

Instant Permitting

States can ensure families can get a permit to install a code-compliant home solar and battery system instantly by:

- Directing the state to deploy an instant permitting platform for home solar and batteries, and requiring local governments to use the state platform or implement an equivalent;
- Requiring local governments to deploy their own instant permitting platform for home solar and batteries; or
- Allowing licensed third-party inspectors or engineers to permit home solar and battery systems, on behalf of local governments.

Remote Inspection

States can ensure families have access to fast and safe inspections that save them money and allow them to start saving money on their utility bills faster by either:

- Requiring local governments to give families the choice to request a remote inspection based on photos and recorded video taken on site and sent to the building inspector; or
- Allowing licensed third-party inspectors or engineers to inspect home solar and battery systems, on behalf of local governments.

Simple & Standardized Permitting & Requirements

The installation of home solar and battery systems should be as standardized as possible, without unnecessary permits, approvals, inspections, or fees.

- **Eliminate Unnecessary Reviews:** States should require that local government review of home solar and battery systems be limited to compliance with the building code. Unnecessary aesthetic, historic, or zoning review should not be allowed.
- **One Permit and One Inspection For One System:** States should require local governments to only require a single permit and a single inspection for each home solar and battery system, rather than requiring multiple electrical and structural permits and multiple often duplicative inspections.
- **Standardize Building Codes:** States should require local governments to standardize their building codes for home solar and battery systems, to avoid costly and non-standard local code amendments.
- **Cap Fees:** States should cap total permitting and inspection fees for home solar and battery systems at $200, twice the national median for home improvements.[6]
- **No HOA Approvals:** States should exempt home solar and battery systems from homeowners association approvals.



The Permitting and Inspection Policy Roadmap

By implementing the set of policies we outline below to cut permitting and inspection red tape, states can help drive down the cost of home solar and batteries and put the utility bill savings of home solar in the hands of more American families.

01 Instant Permitting

Families should be able to get a permit for a code-compliant home solar and battery system instantly, rather than having to wait weeks, months or years. Instant permitting eliminates permitting delays and back-and-forth between the installer and the permitting office, and ensures rules are applied clearly and consistently. It saves money not only for families, but also for governments themselves.

SolSmart, a federally funded program that recognizes local governments for encouraging solar development, has set instant permitting as the standard to receive platinum-level certification. Today, hundreds of cities and counties in over 20 states, representing almost half of the national market, have adopted instant permitting for home solar projects. Commercially available instant permitting platforms and remote inspection platforms offer government software for free, and charge a small fee to installers for each project they route through the platform. Even more cities and counties allow licensed building inspectors or electrical engineers to permit and inspect home solar and battery systems, and allow those licensed third parties to use an instant permitting platform.

States can take one of two paths: 1.A state or local instant permitting & remote inspection or 1.B third party permitting & inspection.

1.A.1 State Instant Permitting Platform

THE POLICY

States should deploy an instant permitting platform for home solar and batteries and require local governments to use it or deploy an equivalent. The platform should issue permits and permit revisions for code-compliant systems instantly.

WHY IT MATTERS

Permitting delays are the leading cause of project cancellations, increase costs by thousands of dollars, and add months to project timelines. When each city and county is left to set up instant permitting on its own, families in different towns face different processes and different waits for the same code-compliant system. A single platform managed by the state gives every family the same instant process.

CASE STUDIES

Connecticut, New Jersey and Virginia have passed legislation that directs the state to deploy an instant permitting platform for home solar and battery projects, which local governments can use or deploy an equivalent.

1.A.2 Local Instant Permitting Platform

THE POLICY

States should require local governments to adopt an instant permitting platform for home solar and batteries. Each platform should issue permits and permit revisions for code-compliant systems instantly.

CASE STUDIES

- California and Maryland (first in 2024, and then strengthened in 2026) have passed legislation requiring local governments to deploy instant permitting platforms for home solar and battery projects.
- Hundreds of local governments in over twenty states use instant permitting platforms.

✓ These policies are both supported by SolSmart best practices.

1.A.3 Remote Inspections

THE POLICY

States should require local governments to give families the choice to request a remote inspection, based on photos and recorded video taken on site and sent to the building inspector, instead of an in-person inspection.

WHY IT MATTERS

In-person inspections, where the installer is required to return to the property after installation to meet the inspector, waste time (traveling and waiting in the window for the inspector to arrive) and resources. Staffing shortages and backlogs at local permitting offices slow routine inspections and delay the homeowner turning on their system. An in-person inspection can take hours of staff time because of travel, while inspecting a system from photos should often take less than 15 minutes.

✓ This policy is supported by SolSmart best practices.

CASE STUDIES

- California passed legislation requiring local governments to offer remote inspections for several simple energy saving installations, including home solar and batteries.
- Florida allows remote inspections for many types of building projects, including home solar and batteries.
- North Carolina requires local governments to implement remote-inspection procedures for many types of building projects, including home solar and batteries.
- The National Fire Protection Association (NFPA) has created a standard for remote inspections; the International Code Council (ICC) has created recommended best practices; and a February 2026 report by the Interstate Renewable Energy Council (IREC) concluded remote inspections for solar installations can be "safer and more efficient than onsite inspections."
- Prominent jurisdictions across the country already offer or require remote inspections, including Los Angeles County (California), Pima County (Arizona), Minnesota's Department of Labor and Industry, and Hillsborough County (Florida).

1.B Third-Party Permitting & Inspection

THE POLICY

States should allow families or their installers to use licensed third-party building inspectors, electricians, or engineers to permit and inspect home solar and battery systems on behalf of local governments. Those third parties can use an instant permitting platform and perform inspections remotely. The family chooses the licensed third party provider.

WHY IT MATTERS

Third party licensed electricians and engineers, with the expertise to perform plan reviews and inspections, can offer families a quicker alternative than waiting on an under-staffed local government. Letting families use third parties frees local staff to focus on complex projects and core public safety priorities, and maintains safety because providers must assess projects to the same codes.

✓ This policy is supported by SolSmart best practices, which acknowledges the role of third parties in speeding up home solar and battery permitting and inspection.

CASE STUDIES

Texas, Florida (passed in 2025 and strengthened in 2026) and North Carolina allow families to use third party licensed building inspectors or electrical engineers to permit a variety of home renovation and home backup energy projects, including home solar and batteries. They allow those licensed third parties to use an instant permitting platform.

02 Simple and Standardized Permitting & Inspections

Convoluted permitting processes, requirements based on aesthetics, and plan review by many jurisdictions for a single project add costs, delays, and hassle to home solar and battery projects. To remove this red tape, states should limit review to the building code, require a single permit for each system, standardize building codes, cap fees, and exempt home solar and batteries from homeowners association approvals.

2.1 Eliminate Unnecessary Reviews

THE POLICY

States should require that local government review of home solar and battery systems be limited to compliance with the building safety codes. Unnecessary aesthetic, historic, or zoning review should not be allowed, and home solar should be allowed in historic districts and on historic homes.

WHY IT MATTERS

Construction requirements based on aesthetics force homeowners to select equipment or system configurations that reduce their bill savings and increase the cost, such as by requiring the panels to be pointed away from the sun or installed less efficiently. Aesthetic, zoning and historic review can often take years, requiring families to suffer through a process that adds significant delay and cost. Planning and zoning rules are also used to prevent a homeowner from installing solar on their roof or a battery on their property.

✓ This policy is supported by SolSmart best practices.

CASE STUDIES

- California limits review of rooftop solar and home battery permit applications to requirements that protect safety.
- Massachusetts limits permitting authorities from applying zoning and aesthetic requirements to rooftop solar and home battery systems.
- Maryland blocks jurisdictions from applying requirements unrelated to safety to rooftop solar and home battery projects permitted via automated software, which is required statewide.

2.2 One Permit and One Inspection for One System

THE POLICY

States should require local governments to require only a single permit, issued by a single building or electrical department, for each home solar and battery system, rather than multiple electrical and structural permits. All components of a system, such as a battery, and related work, such as an electrical panel upgrade, should be covered by that one application.

States should require local governments to combine all inspections of a home solar and battery system into one inspection. No more than one inspection per project should be required unless the first inspection fails.

WHY IT MATTERS

Obtaining approval from multiple units of government for a single home solar and battery project adds paperwork, leads to contradictory requirements, and delays installation dates. Frequently, many jurisdictions (cities, counties, multiple departments within cities and counties such as the fire department and building department, other units of local government such as independent fire districts, and state entities) can be involved in permitting a single system.

A single home solar and battery system can face separate inspections from different departments or units of government. These inspections are duplicative and sometimes contradictory, and each one adds another appointment and another wait before a family can turn on their system.

✓ This policy is supported by SolSmart best practices.

CASE STUDIES

- California limits the review of the application to install rooftop solar and home batteries to the building department, and only allows one inspection per home solar project.
- Texas prohibits jurisdictions from regulating the installation or inspection of a residential energy backup system.

2.3 Standardize Building Codes

THE POLICY

States should require local governments to adopt the state's standard building codes for home solar and battery systems, to avoid costly and non-standard local code amendments.

WHY IT MATTERS

Byzantine, opaque, and inconsistently applied permitting requirements create unnecessary barriers to installing home solar and batteries, lead to large variations in processes between and within permitting offices, and stifle competition in the market. Local amendments to building safety codes are unnecessary because national model codes and state codes already take into account variations in climate, geology, topography, environment, and housing.

✓ This policy is supported by SolSmart best practices, which recommend that all jurisdictions adopt the current model codes.

CASE STUDIES

Connecticut, Florida, Kentucky, Massachusetts, Michigan, Minnesota, Montana, New Jersey, Ohio, Rhode Island, and Wisconsin apply uniform building codes throughout the state, with little to no exceptions for local amendments.

2.4 Cap Fees

THE POLICY

States should cap total permitting and inspection fees for home solar and battery systems at $200, twice the national median for home improvements.[7] Fees should reflect the staff time a permitting office spends, not the value of the installed system, and local governments should publish their fees online and share them with a state agency that publishes the fees for every permitting office.

WHY IT MATTERS

High and inconsistent permitting and inspection fees raise the cost of installing home solar and batteries and make it difficult for installers to set expectations for homeowners.

✓ This policy is supported by SolSmart best practices.

CASE STUDIES

California (first passed, and then strengthened twice), Colorado (first passed, and then strengthened twice) and Maryland have limits on solar and battery permitting fees.

2.5 No HOA Approvals

THE POLICY

States should exempt home solar and battery systems from homeowners association approvals. Homeowners should not need to seek approval from the association or notify the association or neighbors of their plans to save money on their utility bills, and associations should not set rules on system design, such as a prohibition on panels being visible from the street.

WHY IT MATTERS

Homeowners associations block properties from going solar, force homeowners to follow a convoluted process that can take months to gain approval to install the panels, and enforce requirements that lower the utility bill savings from a home solar system and increase its cost.

✓ This policy is supported by SolSmart best practices.

CASE STUDIES

- Many states, including Arizona, California, Florida, Hawaii, and Texas, prevent HOAs from prohibiting home solar installations, although some allow them to place limited restrictions.
- Many states have passed legislation preventing HOAs from banning or restricting property owners from making other additions to their property, such as installing flags, clotheslines, and satellite dishes, or storm shutters.

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7 Casquero-Modrego, N., et al. (2026). Understanding the Costs and Barriers of Residential Electrical Panel and Service Upgrades. Lawrence Berkeley National Laboratory, https://escholarship.org/uc/item/4gt7h0d8 (finding that permit fees across eight residential work categories were generally around $100, whereas solar PV installations was the notable exception, with a median of $200).

PERMIT POWER

Permit Power is an energy affordability nonprofit organization that makes it cheap and easy for Americans to power their lives. We do research, education, and advocacy to break down the bureaucratic barriers that get in the way of American families installing home solar, batteries, and other energy upgrades.