

# Can the Solar Industry Survive Without Good State Level Policy?

Solar power is rapidly evolving. Thanks to improved module efficiency and more cost-effective manufacturing processes, it's now possible for homeowners, municipalities, businesses, and utilities to access efficient photovoltaic power (PV) at a reasonable cost.

The challenge? The absence of standardized state-level solar policies. While the Inflation Reduction Act (IRA) offers more certainty for the solar industry at a federal level, state policies remain in flux. Net energy metering, zoning and permitting, and local tax treatment all affect solar adoption.

**Let's look at the impacts of these solar growth policies and their role in scale solar deployments.**

## State-Level Policies and the Solar Industry

State-level policies play a vital role in the solar industry's success. By providing stable frameworks, incentives, and streamlined processes, these policies attract investments, create jobs, drive innovation, lower costs, and contribute to environmental sustainability. In short, good state-level policies are a crucial catalyst for the growth and advancement of the solar industry.

Without supportive policies, solar companies can encounter substantial challenges in attracting investments and expanding their operations. Heightened costs and heightened uncertainty surrounding policy decisions can dissuade consumers and businesses from embracing solar energy, impacting the demand for solar products and services. Ultimately, the deficiency of sound state-level policies can impede solar companies' growth, profitability, and overall viability in specific markets.

Three factors contribute to these solar energy ups and downs.



### Zoning & Permitting

Zoning and permitting laws play a pivotal role in shaping the outcomes of solar projects, with significant implications for their feasibility and implementation. For example, a Department of Energy project that tracks zoning in 6 Midwest states (IL, IN, MI, MN, OH, WI) currently has over 1,600 zoning ordinances in its database. Favorable regulations that designate suitable zones, streamline permits, and ensure aesthetic integration can foster efficient solar development.

Conversely, restrictive or ambiguous zoning laws create barriers and uncertainty, impeding progress. Even just the consideration of solar and clear solar policies in municipal code positively impact installed solar capacity. Well-crafted zoning frameworks that identify optimal sites, provide clarity, and align with renewable energy goals are essential for driving solar energy's growth and successful deployment.



### Value of Solar and Net Metering Policy

Net metering policy, which varies among states, has profound financial implications for distributed solar energy. While some states offer favorable compensation rates, others impose lower rates or additional fees, impacting the economic viability of solar projects. Some states have adopted Value of Solar (VOS) studies to address this, and unsurprisingly, the details matter. Typically, 5-10+ common variables are being considered (such as avoided energy generation, avoided generation capacity, and avoided transmission capacity), and with less consensus and inclusion of societal impacts (avoided cost of carbon and local economic benefit).

These studies assess the true value of solar energy by considering its benefits, such as reduced transmission losses and environmental advantages. By incorporating comprehensive VOS studies into their net metering policies, states can establish fair compensation mechanisms that accurately reflect the value of solar generation. This approach promotes greater financial certainty for solar system owners and encourages the widespread adoption of clean energy technologies.



### Tax Treatment

The taxation of solar projects varies significantly between states (and within states), contributing to financial disparities in renewable energy deployment. Tax policies related to solar projects differ across jurisdictions, resulting in varying levels of support or burden for solar developers and system owners. Some states offer generous tax incentives, such as sales or property tax exemptions, which enhance the financial viability of solar projects and encourage their adoption. Conversely, other states may impose taxes or fees on solar installations, potentially hindering their economic feasibility and slowing the transition to renewable energy.

Further complicating matters, tax incentives written into state law are occasionally challenged in court well after projects have been placed in service – like recently happened in Missouri. Harmonizing tax policies and providing consistent, favorable, and predictable taxation frameworks across regions can create a level playing field and promote the widespread adoption of solar energy.

## Solving for State Solar Uncertainty

States must create consistent solar guidelines and incentives to solve solar uncertainty and encourage new solar projects. This starts with a more robust policy. Five factors contribute to effective solar policy:



### Collaboration and Stakeholder Engagement

Engaging with relevant stakeholders, policymakers, industry representatives, community members, and environmental organizations in a collaborative dialogue helps identify shared goals and formulate effective policies addressing the challenges. This collaboration can lead to better-informed decisions and inclusive policy frameworks.



### Standardization and Best Practices

The industry can seek to establish standardized guidelines and best practices for zoning laws, net metering policies, and taxation of solar projects. By providing clear and consistent frameworks, these measures can reduce ambiguity, streamline processes, and create a level playing field for solar development across different jurisdictions.



### Incentivize and Streamline Permitting

The solar industry would benefit from streamlining the permitting process, establishing simplified and transparent procedures, reducing administrative burdens, and expediting approval timelines.



### Value of Solar Studies

It is important to accurately assess solar energy generation's true value and benefits and conduct comprehensive Value of Solar (VOS) studies. States should incorporate the findings of these studies into net metering policies, ensuring fair compensation rates that reflect the full value of solar generation and environmental impacts.



### Education and Outreach

The state should increase public awareness and understanding of the benefits of solar energy through targeted educational campaigns. These campaigns will encourage community involvement, provide resources, and facilitate access to information about solar technologies. Initiatives like SolarApp+ could benefit from broader local advocacy efforts.

## State-Level Solar Policy Impacts: A Summary

**State solar industries' success is partly driven by efficiency and equipment.** As technology evolves and costs come down, there's a natural uptick in clients looking to leverage solar solutions.

**The solar industry's thriving future relies heavily on good state-level policy.** While federal-level certainty is provided by the Inflation Reduction Act (IRA), the Solarcoaster continues to impact the industry in numerous states. Zoning regulations, metering policies, and tax treatment significantly influence the feasibility and success of solar projects.

By implementing collaborative **stakeholder engagement, standardized guidelines, streamlined permitting processes, comprehensive Value of Solar (VOS) studies, and effective education and outreach**, the solar industry can overcome these challenges and foster the widespread adoption of clean energy technologies. States, recognizing their pivotal role in shaping the solar industry's trajectory, must also establish supportive policies, including robust renewable portfolio standards, to ensure its thriving future.

### Resources

<https://www.energy.gov/oe/articles/review-recent-cost-benefit-studies-related-net-metering-and-distributed-solar-may-2018>  
[https://www.sttoday.com/news/local/govt-and-politics/missouri-halts-solar-tax-break-as-federal-incentives-expand/article\\_59c6a41d-c3a8-586e-be05-d2d35a69cce8.html](https://www.sttoday.com/news/local/govt-and-politics/missouri-halts-solar-tax-break-as-federal-incentives-expand/article_59c6a41d-c3a8-586e-be05-d2d35a69cce8.html)  
<https://energyzoning.org/>  
<https://techxplore.com/news/2023-04-renewable-energy-zoning-states.html> [https://solarapp.nrel.gov/adoption\\_at\\_a\\_glance](https://solarapp.nrel.gov/adoption_at_a_glance)

