



Conservation Law Foundation



Acadia Center



American Farmland Trust
SAVING THE LAND THAT SUSTAINS US



VOTE SOLAR

Smart Solar Siting for New England

Solar deployment is becoming constrained because of increasing conflict over the pressure that projects, especially large-scale projects, are putting on farms, forests, and other land. Flat, open farm fields, often the most productive farmland, are highly desirable for solar siting. This new pressure compounds the severe “competition for land” in New England already due to commercial and residential development, efforts to protect natural resources, and climate change. American Farmland Trust, Acadia Center, Conservation Law Foundation, Vote Solar, and Vermont Law School are working to develop resources to support Smart Solar Siting and help reduce conflicts through research and analysis, and through developing stakeholder agreement on a range of smart solar siting principles, policies, and programs that support this goal.

High-Level Guiding Principles for Solar Energy Development

State and municipalities in New England vary widely in their solar programs and policies. Community perceptions, buy-in, and engagement on this issue vary even more so. Through prioritizing stakeholder engagement, and using data-driven decisions that consider the inherent trade-offs associated with development of clean energy and land-use, states and municipalities can develop smarter solar siting programs and policies with greater transparency and community buy-in. **This document aims to lay out high-level principles that are useful for states, municipalities, and communities to consider when developing solar siting programs and processes, or when revising current programs or policies.**

Process Principles

Solar siting can be a complicated issue. As a result, how stakeholders are engaged and how planning processes unfold matter greatly. These principles may be useful for establishing processes for a state or community to develop a more transparent solar program and to build greater stakeholder consensus

Convene stakeholders early

Convene a formal stakeholder group to bring broad representation to the table in advance of establishing a policy or issuing a decision about a specific project proposal. Go beyond the “usual suspects.” Don’t get hung up inviting all the right individuals - rather, be sure that all relevant categories are represented. Stakeholders will likely include clean energy and climate advocates, conservation and other environmental organizations, land trusts, renewable energy/solar developers, municipal officials such as town planners, environmental justice advocates, farmers and other agriculture interests, consumer or ratepayer advocates, utility representatives, state legislators, and even state regulators.

Draft a problem statement

Draft a statement articulating the policy problem – from a shared perspective. This will require constructively communicating interests and positions at the outset. Agree on specific goals for the group (e.g., collect data, formulate policy recommendations, craft consensus documents, etc.) and a general timeframe. The siting issue is complicated, so consider delegating various work streams to subcommittees or small groups. There should be a lot of expertise at the table – use it!

Know the policy context

Be familiar with the solar programs and policies driving solar development in your state. Try not to view the issue in a silo. Consider all relevant state policy goals, from greenhouse gas emissions reductions and clean energy deployment targets to conservation and agricultural goals. State regulatory agencies must consider ratepayer impacts of renewable energy policy. Further, local governments often play a key role in siting through zoning, permitting, and comprehensive planning processes. For New England state policies currently in place please review our [New England Farmland Solar Policy Brief](#).



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Adopt shared principles

Spend time drafting a set of solar siting principles to guide future policy discussions around smart solar siting. Remember that principles are high-level statements of shared values – they are not themselves policies or solutions. Avoid delving into policy development during the drafting of these guiding principles.

Collect data

Data can help drive good decision-making. Know the local landscape for solar, including how much is being built and where. Some states have specific solar deployment targets. Some have existing GIS or other mapping of environmental areas, including core forests and critical habitats. A few key questions are: How much solar must be deployed to meet robust climate goals? How much “preferred” siting (including rooftops, contaminated sites, and other previously developed parcels) is available? How much agricultural and forest land is considered prime? **States and localities should consider commissioning a renewable energy potential study that focuses on land use and considers the cost implications (both for the state and thus the ratepayers) of various deployment scenarios.**

Consider a range of policy approaches

There is no single solution to the solar siting challenge. Smart solar siting may require a range of policy approaches at the legislative, regulatory, and community level. Be open to well-considered compromise that balances the need for accelerated solar deployment with reasonable environmental and agricultural protections. See [Policy Strategies for Farmland Protection](#) for a menu of Smart Solar Siting policy options.

Substantive Principles

While there is no one-size-fits-all policy for smart solar siting, these high-level substantive principles can help to guide a state or community planning process.

Meet state climate change & clean energy goals

Accelerate the pace of meeting the state’s climate and clean energy goals, including through strategic, thoughtfully-sited clean energy development, including solar.

Design a smart planning process

Undertake comprehensive planning so that stakeholders understand the amount of solar needed to meet climate change and clean energy goals, where it should be sited, the relative siting costs across those options, and what land should be protected from development. This process should include a robust stakeholder process, transparent data gathering, and reporting to understand the impacts of solar development on the landscape.

Educate local governments

Build local government capacity to plan proactively for solar development by ensuring that cities and towns have the information they need, including accurate data and an understanding of state policies, to make smart decisions about solar siting. Ensure that local municipalities are equipped with data and resources, in order to maximize benefits from projects sited in their community.

Engage and empower communities

For states, provide communities with opportunities to weigh in, engage in program development, and benefit from projects in concrete ways, such as direct investment and long-term ownership. It is especially important to conduct thoughtful and meaningful community outreach in environmental justice communities and other communities that have experienced disproportionate burdens of environmental harm.

For resources and more information on the New England Smart Solar Siting Partnership please visit:
<https://farmland.org/New-England-solar>



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Promote equity

Promote racial and economic equity in solar development, including by providing equitable access to solar, incentivizing community-scale and low-income solar development, and ensuring that communities in which solar is sited are able to benefit, for example through lower energy costs or through direct ownership of solar assets. Engage local pools of investment capital for local projects.

Community engagement & equity considerations

Community engagement

Ideally, a community is proactively engaged in solar development, well informed throughout the process, and directly involved in a rigorous review process during which the community has multiple opportunities to weigh in.

Community benefits

Consider how benefits from a solar program will flow to the community, for example lower energy costs? Does this program consider potential aesthetic and other harms, and require they be mitigated? Support communities in seeking competitive bids for solar sites. Include maximizing economic benefits to the community, including low- and moderate-income households as key evaluation criteria.

Community Information

It is important for communities to be informed about the bigger policy picture as they advocate for smart siting within their community. For example, how much land do we need for solar statewide and what types of land are available and cost-effective for solar? Is it feasible for developers to site on brownfields or rooftops in a community and if not, why?

Distinct challenges for rural versus urban

It is important to consider the distinct challenges for low income residents in urban and rural settings: low income urban communities may have trouble accessing solar at all, while many projects are sited on land in low income rural communities even if the local residents cannot or do not benefit from the projects.

Balance important land uses

Balance the need for solar energy with other critically important land uses, including protecting forests, retaining working farmland, building affordable housing, and keeping environmentally-sensitive land and key habitats in long-term conservation.

Site on “preferred” sites whenever possible

Incentivize solar development on “preferred” sites, including brownfields, parking lots, rooftops, landfills, and sand and gravel pits, that have already been disturbed. Minimize solar development on greenfields, including farmland, forests, and open space, and ensure that any land loss is mitigated. Consider forest and farmland categories (such as prime) and the relative siting impacts based upon productivity. Scale incentives to make preferred siting more attractive in practice than greenfields development.

Protect vulnerable habitat

Identify and protect ecologically important areas for conservation and wildlife habitat from solar development. Require that solar development on greenfields meets minimum ecological and environmental impact standards.

Support design innovation and research alternative siting methods

Alternative siting methods can bring significant co-benefits to the community. Dual-use solar provides opportunities for farmers to keep farmland in use for crops or grazing while generating solar energy through alternatively designed solar arrays. Track and share research data to support evaluation and innovation.

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