An Introduction to the Solar Power in Your Community Guidebook

April 14, 2022



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Webinar Speakers



Energy Laboratory







Abigail Randall ORISE Fellow at U.S. Department of Energy





Abbe Ramanan Clean Energy States Alliance (moderator)





Solar Power in Your Community

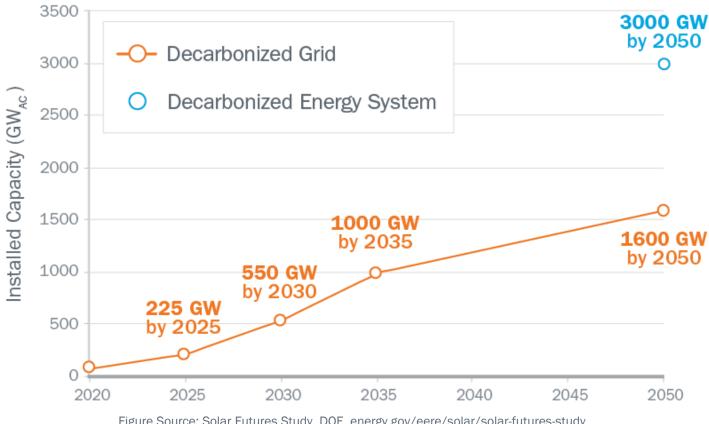
Helping Local Governments Increase Access to and Deployment of Solar Energy Technologies



Solar Futures

The 2022 edition of the guidebook highlights new and existing technologies and strategies to maximize the benefits of solar to all communities

Solar Deployment 2020-2050



Community's Role in Advancing Solar

Examples of Common Barriers to Solar Deployment



Limited access to capital



Restricted land or rooftop availability



Complex local policies



Lack of a local solar workforce

Local governments are uniquely positioned to address these barriers

The Solar Power in Your Community guidebook can help!

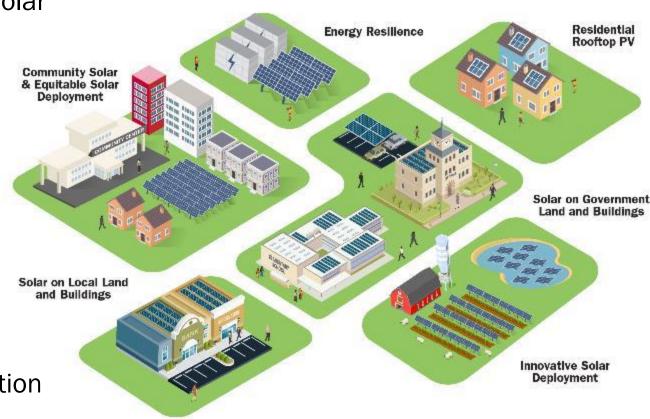
Solar Power in Your Community Chapters

1. Organizing and Strategizing a Local Solar Effort



Solar Spotlight: Ensuring LMI Inclusion in Solar Efforts

- 2. Making Solar Available and Affordable for Residents and Businesses
- 3. Updating Local Policies and Processes
- 4. Developing Local Workforce Training and Education Programs
- 5. Educating and Empowering Potential Customers using Inclusive Strategies
- Solar Spotlight: Racial Equity in Solar Adoption
 - 6. Installing Solar on Local Land and Buildings

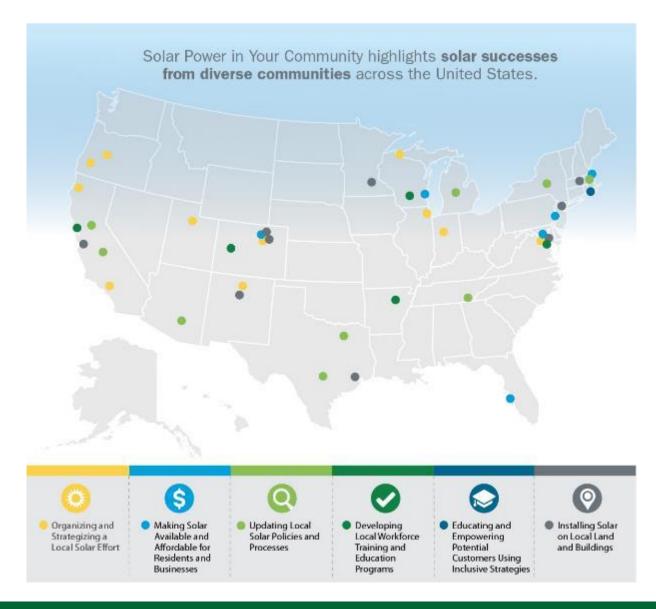


Navigating the Solar Power in Your Community Guidebook

- Topic introduction and recommendations for implementation
- Real world case studies of communities to have implemented the topic or technology
- Resources with in-depth information on discussed topics or technologies



Suggestions for adoption of discussed topics are marked with the "Tip" icon!



Organizing and Strategizing a Local Solar Effort

Stakeholder Engagement Strategies:

- Create a local solar advisory committee or task force
- Coordinate with key organizations
- Engage local stakeholders in decision making



Solar Planning Support



Technical assistance



Federal, state, or regional funding opportunities



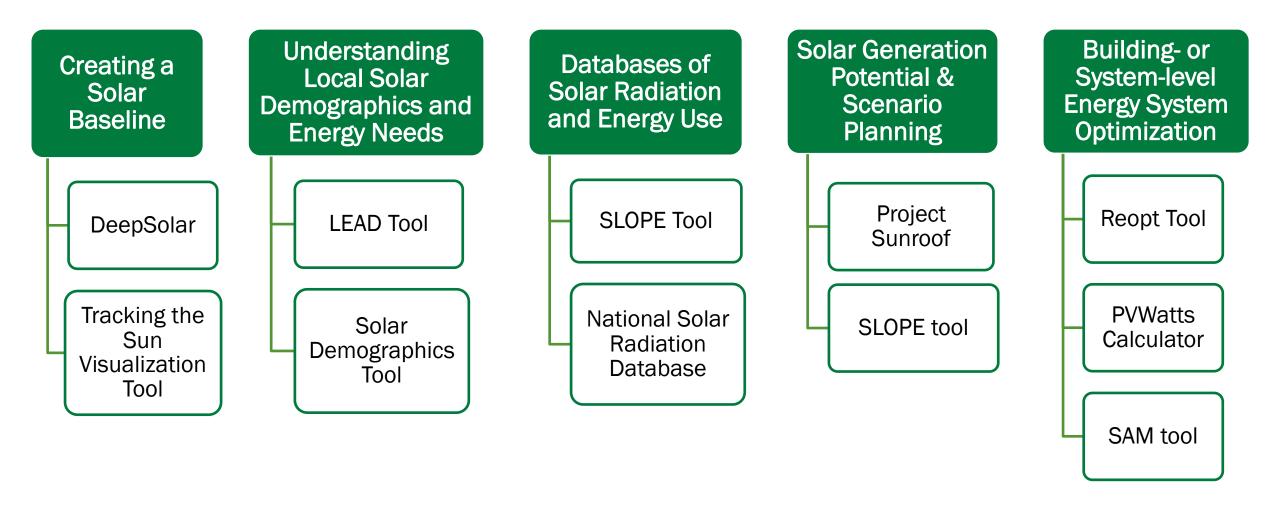
Intern or fellow support

Establishing Solar Installation Targets

- Develop an installation baseline
- Set realistic solar targets
- Consider local policies and priorities
- Incorporate specific goals such as
 - low- and moderate-income targets



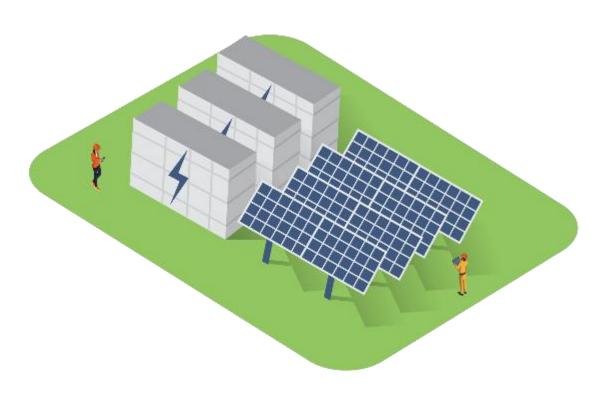
Tools for Solar Planning



Incorporating Solar into Existing Plans

- Sustainability Planning
- Climate Action Planning
- 100% Renewable or Carbon-Free
 Targets
- Resilience Planning

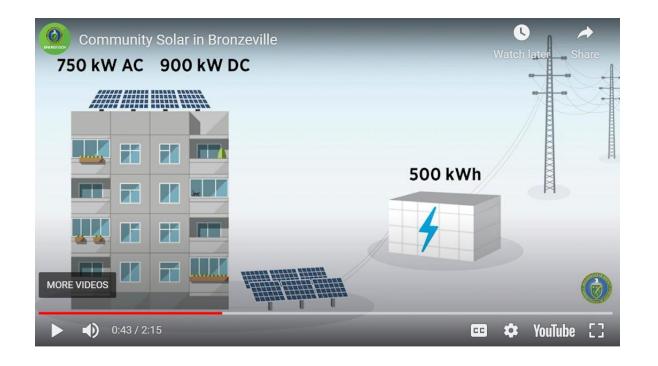
energy.gov/solarguidebook



Featured Case Study: Bronzeville, IL Microgrid Project

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- Based in a diverse neighborhood on Chicago's south side
- 750 kW of solar and a 500-kW storage system
- Serves over 600 families and 10 critical facilities



Solar Spotlight: Ensuring LMI Inclusion in Solar Efforts

Local LMI solar programs may include strategies to improve energy equity and access to solar such as:

- Specific LMI carve-outs for existing solar programs
- Creating an LMI-specific community solar program, which may be especially beneficial to renters or those without suitable roof space
- Solar on multifamily homes, which can be implemented through local housing authorities or mandated for privately owned multifamily housing
- Loans, grants, rebates, and overall cost reductions for LMI solar adoption
- Creating a Solarize campaign targeted at LMI customers
- Working with the local utility or state Public Utility Commission on LMI solar programming

Making Solar Accessible and Affordable for Residents and Businesses

State & Locally Offered Solar Financing, Cost Reduction Opportunities, and Incentives:

- Solarize Campaigns
- Green Bank
- Property Assessed Clean Energy (PACE)
 Financing

Solar Financing for LMI Households:

- On-bill financing
- Loan loss reserves
- Tailored underwriting criteria for loans
- Federal resources for financing solar



Updating Local Policies and Processes

- Solar Access and Solar Rights Laws
- Updated language for zoning ordnances
- Solar mandates or solar-ready policies
- Streamlined solar permitting and inspections
- Overall process transparency for adopting solar



Developing Local Workforce Training and Education Programs

To develop a robust local solar workforce and to integrate solar energy into education, communities can consider:

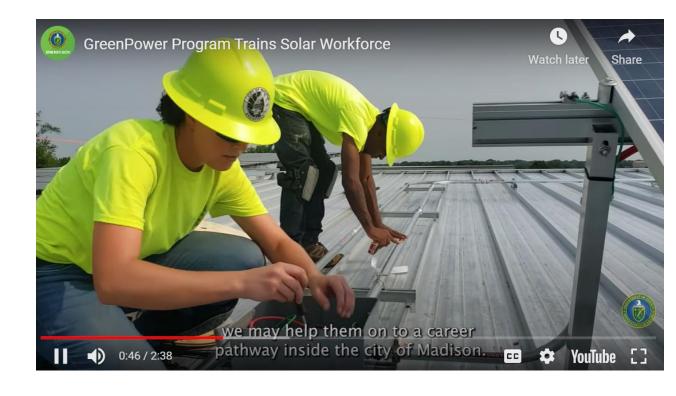
- Local solar education opportunities in K–12 schools
- High school vocational training programs
- Solar in higher education, including local community colleges
- Local workforce training programs
- Programs for hiring veterans such as Solar Ready Vets
- Working with labor unions



Featured Case Study: Madison, WI's Green Power Program

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- Training for underemployed and unemployed residents from underrepresented communities
- As of 2020, participants installed 16
 PV projects totaling over 813 kW
- Guidance for permanent job placement



Educating and Empowering Potential Customers using Inclusive Strategies

Examples of messaging that can be used in educational materials:

- Economic benefits
- Financing options
- Positive environmental impacts
- Resilience during natural disasters and power outages
- Renter-friendly solar opportunities
- Solar for MFAH
- Local success stories

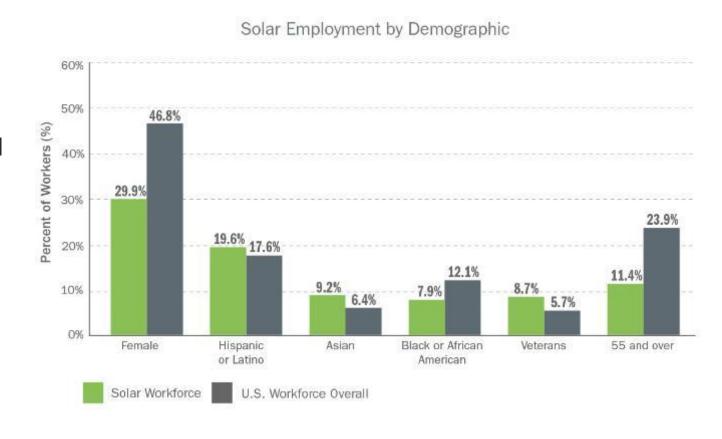




Solar Spotlight: Racial Equity in Solar Adoption

Ways that local jurisdictions can help create a more equitable local solar market:

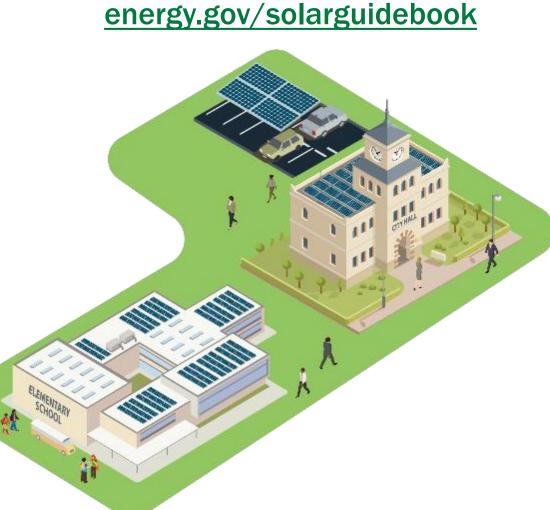
- Adopt specific goals to ensure racial equity
- Account for historical injustices
- Ensure diversity and representation on local advisory committees
- Include underrepresented minorities in decision-making
- Partner with a minority-owned business
- Partner with local schools, universities, and nonprofits on educational and training programs
- Learn about "Ban the Box" policies



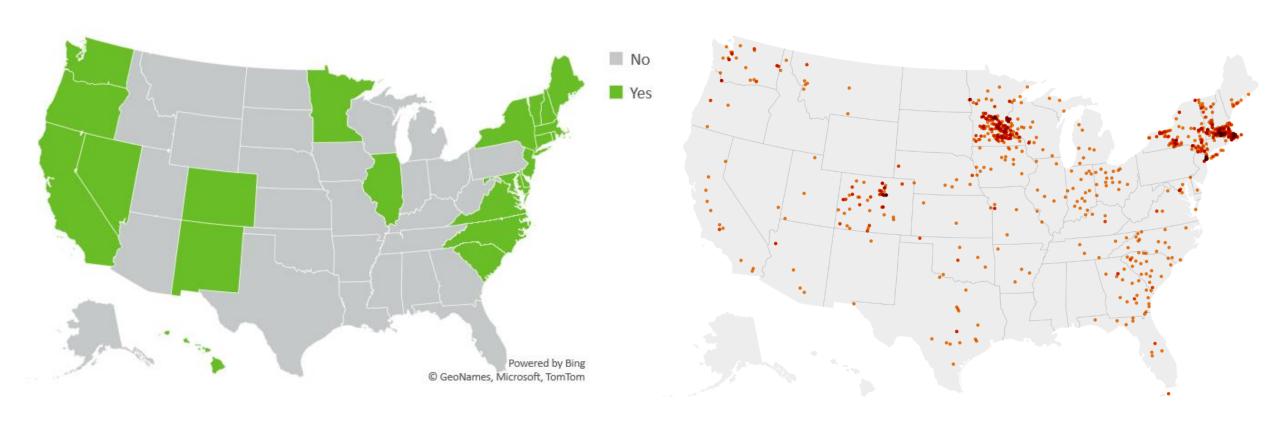
Installing Solar on Local Land and Buildings

Solar technologies and programs ideal for local land and buildings:

- Rooftop solar
- Carport solar
- Community solar installations and subscription programs
- Solar on schools
- Solar on MFAH
- Innovative solar site types such as agrivoltaics or floating solar panels



Community Solar



State-level legislation enabling community solar as of 2021

(Heeter et al. 2021b)

Current community solar projects in the United States as of 2019 (Solstice 2019)

Featured Case Study: Solar on Schools in Batesville, AR

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- Installed a 759-kW system
- Trained teachers on incorporating solar into the STEM curriculum

• A portion of the savings help fund pay increases for teachers



Opportunities from DOE for Local Governments to Expand Solar Access

Apply to SolSmart

- SolSmart designates communities as SolSmart Gold, Silver, or Bronze
- More information:
 - Visit solsmart.org/contact-us

Adopt SolarAPP+ for Solar Permitting

- Tool designed to automate permit review for residential rooftop solar, and other technologies
- More information:
 - Visit solarapp.nrel.gov
 - Email <u>team@solar-app.org</u>

Join the National Community Solar Partnership

- Engage with a network of over 900 community solar stakeholders to share and access resources, events and opportunities
- Apply for technical assistance to support deployment of community solar in your jurisdiction
 - Visit https://www.energy.gov/communitysolar/join-national-community-solar-partnership







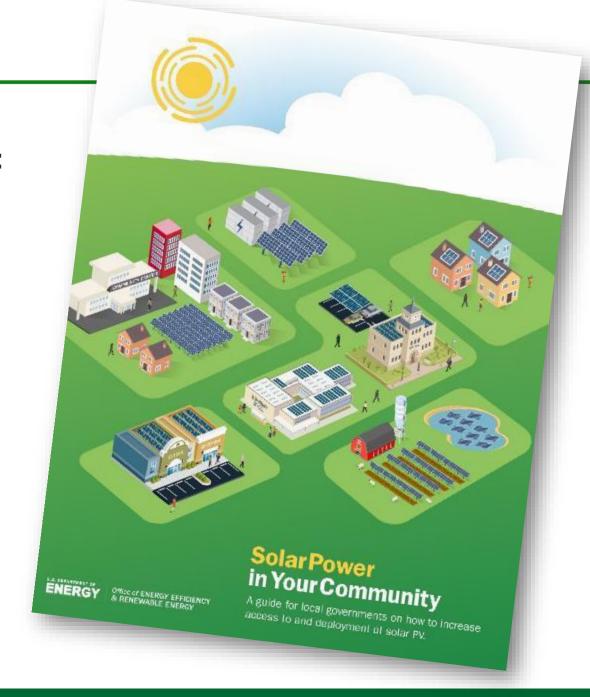
We want to hear from you!

If you have used this guidebook, or plan to use this guidebook, we would love to hear from you:

- How the guidebook was useful to you
- Any information you felt was missing
- Other feedback or recommendations

Provide feedback using the QR code or email Emily Fekete at emily.fekete@nrel.gov







For comments, additional questions, or more information, email Emily Fekete, at Emily.Fekete@nrel.gov





Access the Solar Power in Your Community guidebook at energy.gov/solarguidebook



Thank you for attending our webinar

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For more information and resources, visit www.cesa.org



Upcoming Webinars

Visualizing Equitable Energy Transitions with SLOPE Tuesday, April 26, 2-3pm ET

Resilience Hubs: Model Overview and Community Case Studies Thursday, May 5, 1-2pm ET

Mobile Solar+Storage for Emergency Management Tuesday, May 10, 12-1:30pm ET

Read more and register at www.cesa.org/webinars

