



**MIDWEST CLIMATE CITIES SOLAR TOOLKIT**

# Solar for Municipalities

Solar energy can benefit an entire community, creating opportunities for significant cost savings, pollution reduction, and enhanced resilience when paired with battery storage. These benefits are especially relevant for municipal governments. Municipalities have easy access to sunny rooftops which make them prime candidates to reduce their high electricity costs with solar. On-site solar systems can be easily installed on municipal rooftops and tied directly to the building's electrical system. This behind-the-meter technology allows facilities to purchase less electricity from the grid and save money through energy independence.

## Benefits of Going Solar

Today's budget climate has required municipalities across the Midwest to begin thinking outside the box and exploring new options to reduce operating costs and improve quality of life. For the average local government, energy expenditures are one of the largest budget items. Solar energy presents a compelling solution for cities to reduce operating costs and air pollution while encouraging sustainability jobs and climate resilience.

*Investing in solar can benefit municipalities in many ways.*

### **COST SAVINGS**

Solar costs have fallen significantly and are expected to drop further. Installing solar allows municipalities to reduce their electric bills by producing their own power. Those savings can be re-invested elsewhere in municipal budgets.

### **AIR POLLUTION**

Adding solar reduces the demand for other, polluting sources of energy. Solar is a zero-emission energy source, providing power without producing sulfur dioxide, nitrogen oxides, particulate matter, and smog.

### **JOB CREATION**

The U.S. solar industry now employs more than 250,000 people; nearly five times as many as the entire coal industry. By installing solar, municipalities can create new, sustainable jobs in their local community.

### **RESILIENCY**

Cities are taking the necessary steps to plan for increased threat from natural disasters. During extreme weather events, solar energy can help prevent power outages by operating off the grid, supplying energy to critical facilities, and aiding in recovery efforts.

### **CLIMATE GOALS**

As cities in the Midwest develop ambitious plans to help combat climate change, solar energy provides a useful method to significantly reduce carbon emissions.





## Moving Forward with Solar

### 1. Create a Goal

Publicly announce your municipality's dedication to increasing renewable energy usage. Pass an ordinance or resolution in alignment with your sustainability objectives.

### 2. Calculate your rooftop solar potential and savings

Solar potential and savings are calculated using roof size and shape, shaded roof areas, local weather, local electricity prices, solar costs, and estimated incentives over time.

### 3. Track your rooftops

Manage which buildings are prime candidates for installation and prioritize projects that are the most economical while having the most impact.

### 4. Learn about financial incentives and regulations in your state:

Governments, utilities, and other organizations offer solar tax breaks and financial incentives to make solar more accessible. Research available opportunities for your municipality.

- [DSIRE Database of State Incentives for Renewables & Efficiency](#)

### 5. Consider different ownership models for your project:

It is important to consider the available financing, as each city is different and there are various options for how you might want to own your municipal system.

- [Select an Ownership Model](#)

### 6. Engage with all community stakeholders

Community participation is key to ensuring an equitable transition to renewable energy. Open dialogue and a strong outreach plan is key for public approval of solar installations.

- [Framework for an equitable energy supply transformation](#)

### 7. Expedite installment through new zoning and permitting:

Zoning and permitting help enable solar projects that are cost effective and compatible with existing rooftop use. While installing municipal solar, track and amend deficiencies in permitting and zoning to make business and residential installments easier.

- Planning and Zoning: [Renewable Energy Ordinance Framework](#), [Solar PV](#)
- Permitting: [SolSmart Permitting Process](#) or [SolSmart Zoning and Permitting Guide](#)

*Still want to learn more?*

Check out these resources from the [National Renewable Energy Laboratory](#) and [American Cities Climate Challenge](#).

