Central Ohio Solar Toolkit for Local Governments

LATEST UPDATE: June 2021

The Central Ohio Solar Toolkit for Local Governments was developed at the request of the Energy and Air Quality Working Group in order to assist MORPC members with the installation of solar photovoltaic systems on local government facilities. Despite this focus, any organization seeking to install or procure solar PV systems could benefit from this toolkit.

The toolkit also includes resources for local governments as they turn their focus to preparing for solar PV in their communities. Additional resources will be added as they are developed. To be notified when this occurs, please register your email address here.

How to Use the Toolkit

Prior to clicking on any links, please expand and read through each section of this web page. Then, return to the starting point below and begin the following four sections in order. After that is completed, you can access the additional resources and documents as needed for your project.

If you have questions regarding this resource, please contact:

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Start Here ↓

Please read through the following sections prior to beginning any actions suggested in the resource.

1. Identify your allies

The first action to take is identifying the people who can help facilitate onsite generation projects.

- · Your municipality's energy team
- Electric utility representative
- MORPC representative (contact)

For assistance in connecting with the correct people, please contact the MORPC representative via the contact link above.

To do:

- 1. Inform the contacts above about your interest in solar generation for your building(s).
- 2. Work with your municipality's energy team to identify additional allies within your organization with technical analysis and planning expertise.

2. Know your utility and building

The type of utility that provides for your electricity needs can have an impact on the choices you have when considering solar installations. As of 2021, community solar is currently possible in municipal or rural cooperative territories, but not in investor owned utility territories. Noted below are the utility types for utilities within the MORPC region.

Investor Owned Utility (IOU)

AEP Ohio, First Energy, Dayton Power & Light, Ohio Edison

Municipal (Muni):

Columbus Power, Westerville Electric

Rural Co-operative (Co-op):

South Central Power, The Energy Cooperative, Consolidated Cooperative, Licking Rural Electrification, Logan County Electric, Mid-Ohio Energy, Pioneer Electric, Union Rural Electric

If you have already identified the location desired for a solar installation (i.e. city hall), gather the information below. Your utility representative or benchmarking program can assist you if needed. If you have yet to identify an exact location, or are considering installations at multiple facilities, skip to the next section.

- Electricity Consumption (in kWh)
 - Highest (Monthly)
 - Lowest (Monthly)
 - Total (Annual)
- Electricity Rate (in \$/kWh)
- Demand Charges (if Applicable) (in \$/kW)

To Do:

- 1. Note your electric utility provider and type of utility.
- 2. If you have already identified a location, gather the electricity consumption and cost data noted above.

3. The Renewables Accelerator Toolkit

The Renewables Accelerator developed as a part of the American Cities Climate Challenge provides a thorough source of information to get you started.

Step 1

To begin, review the renewable options for Ohio: https://cityrenewables.org/state/ohio/

Step 2

After that, proceed to the Procurement Guidance Overview page: https://cityrenewables.org/overview/

Step 3

Continue on to the Developing a Strategy page: https://cityrenewables.org/developing-a-strategy/. It is recommended to read through the entire process prior to undertaking any of the activities.

Step 4

Now take a moment to familiarize yourself with the process for the four options available to Central Ohio.

- 1. On-Site Solar: https://cityrenewables.org/on-site-solar/
- 2. Off-Site Physical PPA: https://cityrenewables.org/off-site-physical-ppa/
- 3. Virtual PPA: https://cityrenewables.org/vppa/
- 4. Community Solar (available in Municipal or Rural Cooperative territory only): https://cityrenewables.org/community-solar/

To Do:

- 1. Review the information contained via the links in the four steps above.
- 2. Reconnect with your municipality's energy team, your electric utility provider, and MORPC. These allies will become part of your Solar Energy Team described in the options under Step 4.

4. Begin

Once you have completed the first three sections, assemble your <u>Solar Energy Team</u> and ensure that each member has reviewed the information in Section 3 above. MORPC members and associate members may request MORPC's participation on their Solar Energy Team.

At that point, you can collectively decide where to begin the process. This decision will be based on multiple factors, including but not limited to:

- Whether or not you have a specific site already identified
- If you are looking for multiple solar installations
- The type of utility territory where the site may be located
- The funding mechanism(s) used to procure the solar installation

When a point of entry has been decided upon, return to the appropriate step in Section 3 above and complete the tasks outlined in the Renewables Accelerator Toolkit with your Solar Energy Team. If you are starting from

scratch, you will likely be starting at Step 2. If you have decided on a location for a solar PV installation, you would likely start at one of the four options listed under Step 4.

If you have questions at any point, please contact MORPC. Also, MORPC can assist in economic, environmental and social benefit analyses of solar projects. This may help when seeking approval from elected officials.

To Do:

- 1. Assemble your Solar Energy Team.
- 2. Ensure all team members have reviewed the information in Section 3.
- 3. Decide upon the correct entry point into the process based upon your specific situation. Conduct the tasks outlined in the Renewables Accelerator Toolkit.

Central Ohio-Specific Resources

Glossary

A glossary of terms used in this resource and the Renewables Accelerator Toolkit is available here: https://cityrenewables.org/glossary/.

Utility Information

Speaking with your utility is essential when planning for solar PV installations. If you have any difficulty in identifying your representative, or connecting with the correct person to speak with at your utility, please contact MORPC.

Codes and Permitting

When seeking a greater proliferation of solar PV resources in your communities, residents and businesses benefit from uniform installation codes, permitting processes and zoning. Central Ohio has yet to undertake this coordination, and as tools are developed, they will be found here.

Case Studies

Best Practices in Commercial and Industrial Solar PV System Installation

General Resources

RFP Templates

The following resources are example Requests for Proposals. You should ensure that any RFP you release adheres to your community's RFP requirements.

- Steps to a Successful Solar RFP (Solar Foundation)
- Municipal Land Lease for Solar Development (NYS MSPT)
- Solar Requests for Proposals & Procurement Guidance Customizable templates to facilitate installing solar on your building

Additional Templates

- Athens Eastside Solar RFQ
- Model Land Lease and Solar Easement Agreement
- Standard Contracts and Securitization Resources

Financial Resources

- Database of State Incentives for Renewables & Efficiency
- Property Assessed Clean Energy Financing (PACE)

PACE Providers		
BP Capital Solutions	Dividend Finance	NOPEC
Center Bank	<u>DMCPA</u>	PACE Equity, LLC
CleanFund Commercial PACE Capital, Inc.	Greenworks Lending LLC	PACE Loan Group
Columbus-Franklin County Finance Authority	Heartland Bank	Petros PACE Finance, LLC
Commercial PACE Finance	Home Savings Bank	Stonehill Strategic Capital
Counterpointe Sustainable Real Estate	Inland Green Capital LLC	Twain Financial Partners
Cuyahoga River Capital, LLC	Lever Energy Capital	

- Rural Energy for America Program (REAP)
- Aggregation
- Energy Special Improvement District
- Ohio Energy Loan Fund
- OAQDA
- Solar Cooperatives
 - Solar United Neighbors

Technical Resources

- USDOE Solar Zoning and Access Toolkit
- American Planning Association Planning for Solar Energy and Local Development Regulations
- NREL Solar Ready Policy An Overview of Implementation Practices
- Delaware Valley RPC Renewable Energy Ordinance Framework
- American Farmland Trust Smart Solar Siting Principles and Examples of Local Solar Laws that Protect
 Farmland
- Massachusetts Model Solar Zoning
- Native Vegetation for Solar Arrays
- Solar on Historic Homes

Community Solar Resources (currently only available to municipal and rural co-op utilities)

- Smart Electric Power Alliance Community Solar Program Design Models
- Low-Income Community Solar Policy Guidelines and Sample Bill Language
- USDOE A Guide to Community Shared Solar
- The Community Solar Playbook

Design and Implementation of Community Solar Projects for Low- and Moderate-Income Customers

Low-Income Solar Resources

- Low-Income Solar Policy Guide
- Low-Income Community Solar Policy Guidelines and Sample Bill Language
- Design and Implementation of Community Solar Projects for Low- and Moderate-Income Customers
- Reducing Energy Burden in MF Housing with Solar Energy

Additional Toolkits

US Department of Energy

Solar Powering Your Community: A Guide for Local Governments

New York State Energy Research and Development Authority

Solar Guidebook for Local Governments

SolSmart

SolSmart's Toolkit for Local Governments

US Environmental Protection Agency

Local Government Solar Project Portal

State of Illinois

Illinois Local Government Solar Toolkit

State of Minnesota

Minnesota Local Government Solar Toolkit