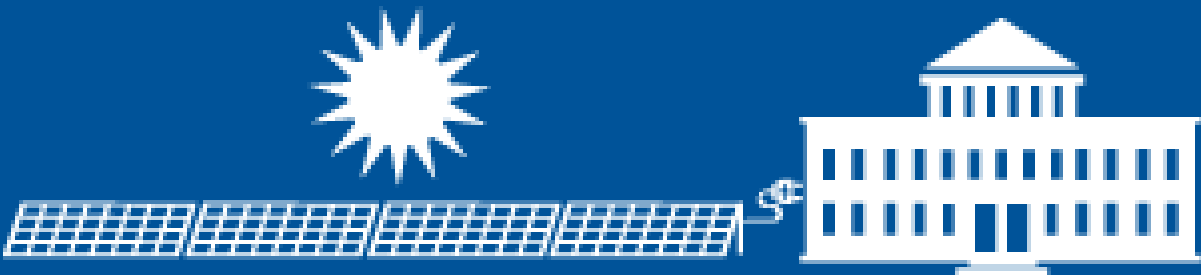


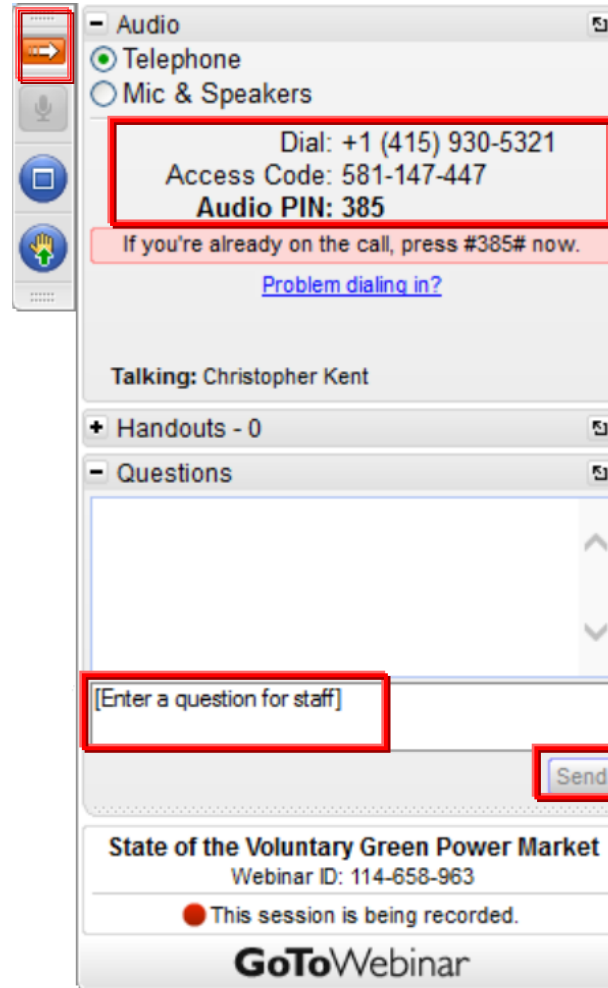
Introduction to the Local Government Solar Project Portal

April 25, 2018



Webinar Logistics

Open and close your control panel



Audio is available your computer's microphone and speakers (VoIP) or telephone:

+1 (562) 247-8422
ID: 770-832-942



Type in your questions here



Hit "send" to submit your questions



If you experience technical difficulties, please contact Grant Strauss at: Grant.Strauss@erg.com

Speakers and Agenda

- Speakers
 - James Critchfield, U.S. EPA
 - Jenny Heeter, National Renewable Energy Laboratory
- Agenda
 - Background
 - Survey Questions
 - Local Government Solar Project Portal Overview
 - Share Your Solar Project Experience
 - Project Development Pathway & Resources
 - Frequently Asked Questions
 - How to Participate
 - NREL training assistance
 - Questions



Background

- The U.S. EPA is collaborating with the U.S. Department of Energy (DOE) and the National Renewable Energy Laboratory (NREL) to advance solar utilization among local governments
- **Objective:** To support municipalities in meeting their environmental, energy and economic goals through solar project development which serves municipal operations
- **Timing:** Over the next 2-years, EPA will be engaging with local governments across the country that are considering developing solar projects
- **Value:** Recognition for developing solar projects, access to valuable tools and resources, peer exchange opportunities, webinars on key solar development issues and access to in-person regional/state workshops



Quick Attendee Poll

Poll Question #1

What is your municipality's total current installed solar PV capacity serving government operations (roof and ground systems)?

[Select One]

- a) None
- b) <100 kW
- c) 100 kW to 1 MW
- d) >1 MW
- e) Unknown



Poll Question #2

How much new solar capacity is your municipality wanting to install over the next 2-years to serve government operations?

[Select One]

- a) No immediate plans to install solar
- b) <100 kW
- c) 100 kW to 1 MW
- d) >1 MW
- e) Unknown



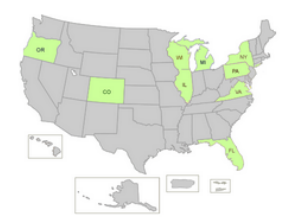
Solar Project Portal Overview

- Solar Project Portal Home Page
 - Recognizes municipalities seeking to develop solar projects
 - The project list serves as a peer exchange platform where you can identify examples of milestones achieved by other municipal governments
- Project Development Pathway & Resources
 - Identifies in detail the 7 steps of project development
 - Offers key resources and tools to assist you in achieving each step
- Share Your Solar Project Experience
 - Describes how to have your municipality listed on the Portal Home Page
 - Here you will find information on how to update EPA on your progress
 - Find information regarding upcoming Peer Exchange and Workshop events
- Frequently Asked Questions (FAQ)
 - Details expert answers to common project development questions
 - Have a question? Submit it on this page and receive an answer

Local Government Solar Project Portal

EPA invites local governments across the country to meet their environmental, energy, economic and domestic job creation goals through greater utilization of solar energy from on and off site solar projects that serve municipal operations.

Local governments will find [project development resources](#) and opportunities to [learn from industry experts](#) and their peers. To [Share Your Progress](#) and learn more about available resources and [technical support](#), see below.



Click on the Map to View Individual Local Government Progress

Project Development Pathway & Resources
Share Your Solar Project Experience
Frequently Asked Questions

Local Government Solar Project List

The table below details individual local government progress towards developing solar energy projects on municipal properties by successfully completing key project development steps. Your local government can leverage the experience of other municipalities who have gone before or who share common project development challenges and opportunities. To learn more about having your solar project added to this list please visit the [Share Your Solar Progress](#) page.

Many of the following links exit the site [EXIT](#)

Local Government	State	Network Options	Pathway Progress	Project Development Pathway Steps								
				EE Public Commitment	EE Development Plan (Optional)	Collection of Utility Data & Site Assessment	Number of Projects Under Consideration	Issued Request for Proposals	Proposed Evaluations	Signed Contract	Capacity Installed	
City of Alexandria	VA		<div style="width: 20%; background-color: #0070C0;"></div>	Link PDF (31 Jun, 2016)	-	-	-	-	-	-	-	-
City of Ashland	OR		<div style="width: 20%; background-color: #0070C0;"></div>	Link	-	-	-	-	-	-	-	-
City of Chicago	IL		<div style="width: 20%; background-color: #0070C0;"></div>	Link PDF (19 Jun, 2016)	-	-	-	-	-	-	-	-
City of Durango	CO		<div style="width: 20%; background-color: #0070C0;"></div>	Link PDF (19 Jun, 2016)	-	-	-	-	-	-	-	-
City of Eau Claire	WI		<div style="width: 20%; background-color: #0070C0;"></div>	Link PDF (27 Jun, 2016)	-	-	-	-	-	-	-	-
Town of Fraser	CO		<div style="width: 20%; background-color: #0070C0;"></div>	Link	-	-	-	-	-	-	-	-
City of Grand Rapids	MI		<div style="width: 20%; background-color: #0070C0;"></div>	Link	-	-	-	-	-	-	-	-
City of Knoxville	OR		<div style="width: 20%; background-color: #0070C0;"></div>	Link PDF (24 Jun, 2016)	-	-	-	-	-	-	-	-
New York City	NY		<div style="width: 100%; background-color: #0070C0;"></div>	Link PDF (27 Jun, 2016)	✓	✓	4,000	Link PDF (10 Jun, 2016)	✓	✓	13.24 MW as of 7/1/16	
City of Philadelphia	PA		<div style="width: 20%; background-color: #0070C0;"></div>	Link PDF (28 Jun, 2016)	-	-	-	-	-	-	-	-
City of Riverside	VA		<div style="width: 20%; background-color: #0070C0;"></div>	Link PDF (17 Jun, 2016)	-	-	-	-	-	-	-	-
City of Sarasota	FL		<div style="width: 20%; background-color: #0070C0;"></div>	Link	-	-	-	-	-	-	-	-
City of Urbana	IL	DFC, SolidSmart	<div style="width: 100%; background-color: #0070C0;"></div>	Link PDF (21 Jun, 2016)	Link PDF (28 Jun, 2016)	✓	6	✓	✓	✓	14.25 MW L 100% in development	

Have general questions? Email: EPA.SolarPortal@epa.com (contractor in support of EPA)
Have project development questions? See [frequently asked questions](#).



Project Development Pathway

ESTABLISH A SOLAR PROJECT DEVELOPMENT AND/OR RENEWABLE ENERGY USAGE GOAL

Establishing a publicly available solar project development and/or renewable energy usage goal helps bring clarity and focus to the process of developing solar projects. It gives your local government direction and affirms your intent to both you and your stakeholders. This is the minimum requirement to be listed on the Portal.

1

DEVELOP A PROJECT DEVELOPMENT PLAN

One of the best indicators of project development success includes use of a solar project development plan. The plan will detail your local government's specific set of circumstances and chart a pathway. A plan is optional to be listed on the Portal.

2

ASSESS YOUR SOLAR SITE OPPORTUNITIES, CATALOG SITE INFORMATION, AND COLLECT YOUR UTILITY DATA

It is important to understand your solar site opportunities, which starts with collecting site information and utility data. This information becomes critical when seeking project proposals from developers and is the basis for conducting site assessments to identify the most suitable sites.

3

BUILD AND COMMISSION YOUR PROJECT

Once your project is built and generating solar power, EPA would be excited to share your success. Send us an email and provide us a photo of your new project. Email EPASolarPortal@erg.com to provide us with an update and photo of your new project.

7

SELECT A PROJECT PROPOSAL AND SIGN A CONTRACT

You are in the home stretch! After you identify the best project opportunity, it is time to sign a contract. Once you select a project and sign a contract, be sure to let EPA know so we can share your success with your peers.

6

REVIEW AND EVALUATE YOUR PROJECT PROPOSALS

An RFP will generally result in one or more project proposals from developers. Evaluating these project proposals objectively can be challenging, yet is critical for selecting the best project that meets your goals.

5

DEVELOP AND ISSUE A SOLAR REQUEST FOR PROPOSALS (RFP)

An RFP is a solicitation for products and services that outlines the general terms and conditions of request from market suppliers. For solar, this can involve a wide array of requirements. If you are interested in making claims about using renewable energy, be sure to retain the Renewable Energy Certificates (RECs) from your project.

4

Solar Project List

Local Government Solar Project List

The table below details individual local government progress towards developing solar energy projects on municipal properties by successfully completing key project development steps. Your local government can leverage the experience of other municipalities who have gone before or who share common project development challenges and opportunities. To learn more about having your solar project added to this list please visit the [Share Your Solar Progress](#) page.

Many of the following links exit the site [EXIT](#)

Local Government	State Cohort	Network Options	Pathway Progress	Project Development Pathway Steps							
				RE Public Commitment	RE Development Plan (Optional)	Collection of Utility Data & Site Assessment	Number of Projects Under Consideration	Issued Request for Proposals	Proposal Evaluations	Signed Contract	Capacity Installed
New York City	NY			Link	Link (PDF) (114 pp, 13MB)		>100	Link (PDF) (426 pp, 16MB)			10.34 MW so far
City of Philadelphia	PA			Link (PDF) (28 pp, 2.8MB)	-	-	-	-	-	-	-
City of Roanoke	VA			Link (PDF) (77 pp, 1GB)	-	-	-	-	-	-	-
City of Sarasota	FL			Link	-	-	-	-	-	-	-
City of Urbana	IL	GPC, SolSmart		Link (PDF) (3 pp, 67K)	Link (PDF) (26 pp, 1.9MB)		1			-	14.68 MW, 2 MW in development

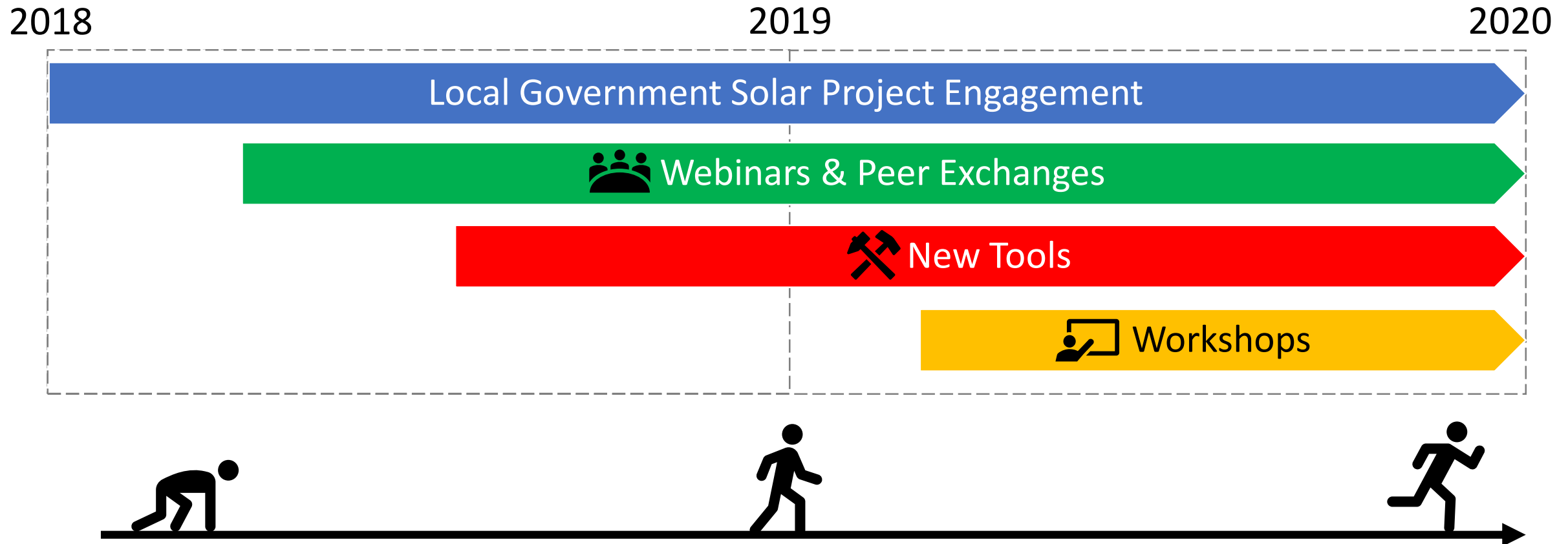


Currently Listed Local Governments

- City of Alexandria, VA
- City of Ashland, OR
- City of Chicago, IL
- City of Durango, CO
- City of Eau Claire, WI
- Town of Fraser, CO
- City of Grand Rapids, MI
- City of Milwaukie, OR
- New York City, NY
- City of Orlando, FL
- City of Philadelphia, PA
- City of Roanoke, VA
- City of Sarasota, FL
- City of Urbana, IL



General Timeline



Quick Attendee Poll

Poll Question #3

For new solar projects targeted for development by 2020, where are you in terms of your progress to date?

[select one]

- a) We have not started the process of developing projects
- b) We have established goal for RE use/project development
- c) We have collected utility and site assessment data
- d) We have issued an RFP or are evaluating project proposals
- e) We have signed a contract or the project is being built



Poll Question #4

What solar project development barriers have you experienced to date?

[select all that apply]

- a) Institutional buy-in, approval or resource constraints
- b) Site opportunity assessments
- c) Understanding project financing options
- d) RFP development and issuance
- e) Project proposal evaluation and selection



How to Plug-in to the Portal?

How to Get Plugged-in and Recognized

- Email EPA your publicly available goal/commitment EPASolarPortal@erg.com
- Be sure to include in your email:
 - Local government point of contact information (e.g., name, phone, email, mailing address)
 - Provide a link or document that details your publicly available commitment or goal
- Your goal/commitment can be evidenced by:
 - Public webpage or sustainability report; government resolution, ordinance, or bylaw; participation in third-party commitment programs (i.e., [ICLEI's 100% RE Cities](#))



Update EPA On Your Progress Over Time

- Share your progress by emailing EPA a progress update spreadsheet at EPASolarPortal@erg.com (spreadsheet available online)
- Substantiate your solar development progress by providing publicly available examples of your step-by-step achievements
 - Step 4 Example: Provide EPA a link to your solar RFP when it is issued
- EPA will post and track your examples on the Portal's home page
 - Other municipalities will be able to review, learn from and leverage progress examples from other listed municipalities
- EPA will check in with you quarterly to ask about your progress



Solar Project Development Progress Spreadsheet

Guidance for Submitting Materials for the Local Government Solar Project Portal								
Portal web address: https://www.epa.gov/epowertoolbox/local-government-solar-project-portal								
This spreadsheet is designed to provide guidance to local governments on how to share their progress in the development of solar project(s) on EPA's Local Government Solar Project Portal. Local governments should review the solar development process steps detailed below, determine which step they have progressed to, and then share their relevant links or documents related to each of the respective steps they've achieved. These resources will then be shared in your listing on the portal website to show your achievements to date and for other municipalities to reference as examples. Since some local governments may have several solar projects in progress at any one time, you may choose to 1) submit examples of the project furthest along the pathway, or 2) submit your best examples, regardless of project, for each step. All projects listed should be serving municipal load.								
DIRECTIONS: Populate the yellow highlighted rows to provide the relevant URL or file name along with a brief description of the document, for the steps you have completed. As you complete additional steps, please send updates, including any files, to EPASolarPortal@epa.com (contractor in support of EPA).								
Local Government Name =>	Solar Capacity Already Installed (MW) =>		Number of Solar Projects Under Consideration =>		If known, Solar Capacity Under Consideration (MW)			
Project Development Pathway Steps								
Pathway Steps:	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Network Options
	RE Public Commitment/Goal	RE Development Plan [optional]	Collection of Utility Data & Site Assessment	Issued Request for Proposals	Proposal Evaluations	Signed Contract	Capacity Installed from New Project(s) (MW)	Network Options [optional]
Guidance for Material Submissions	Provide official documentation of your local government's public renewable energy goal or commitment. Examples include municipal webpages, energy and climate action plans, and documentation of municipal policies, by-laws, or resolutions. You may also reference your local government's participation in third-party groups that explicitly imply a RE goal or commitment for its members, such as ICLET's 100% RE Cities Network. Please enter the URL for your public commitment below. If a URL is not available, please include the resource as an attachment.	Provide documentation detailing your local government's RE development plan with your specific set of circumstances and anticipated pathway forward for project development. The plan may detail progress to date, set short-term and long-term targets, and establish action items. While crafting a RE Project Development Plan is a recommended best practice, sharing evidence of this step is optional. Please enter the URL for your RE development plan below. If a URL is not available, please include the file as an attachment.	This step includes your collection of individual site information and utility data for potential solar project sites. EPA has made available a template spreadsheet for your convenience collecting this information (See Pathway & Resources Web Page). Please share the spreadsheet used to collect this data or enter the URL for your publicly-available utility data and site assessment report below. If you have concerns about sharing individual site information, please contact EPA at EPASolarPortal@epa.com to discuss your options.	Municipalities have experience in issuing RFPs for many different types of products or services - solar is no different! For more guidance on issuing solar RFPs, please see the Solar Project Development Pathway & Resources Web page on the Portal. Please enter the URL for your RFP for solar project development. If the full RFP is no longer available for download, please include the file as an attachment to your email. Use the following row to provide a brief description of the RFP.	Indicate (Yes or No) in the box below if your local government has already evaluated a proposal(s) for solar project development. If you have proposal evaluation criteria or an evaluation rubric that you are willing to share, please include the URL or attach a file. Please use the following row to provide any additional information about your evaluation process.	Indicate (Yes or No) in the box below if your local government has signed a contract for solar project development. If you have a copy of your signed contract that you are willing to share, please include the URL or attach a file. Use the following row to provide a brief description of the example resource.	Provide the capacity of solar newly installed since your participation in the Solar Project Portal. Please be sure to list it in megawatts (MW). Participation for most municipalities will have started on or after May 2018.	Network options may include non-municipal serving solar activities such as community solar, collaborative procurement, EPA Green Power Community (GPC) designation, a regional solar purchasing initiative, or involvement with third-party initiatives such as STARRS or ICLET's 100% RE Cities Network. Solar project activities listed here do not need to serve municipal operations (do not include these activities in your project count or capacity under other steps). These solar project activities would not be serving municipal facilities or load. Please enter information about network options in the box below.
Enter URL or Name of Attached File								
Enter Resource Description (i.e., additional information about the URL or file. See comment on call for more information.)							N/A	N/A
Example 1	http://www.tompkinscountyny.gov/planning/energy-greenhouse-gas	http://www.cityoforlando.net/greenworks/wp-content/uploads/sites/9/2017/02/GreenWorks_MunicipalSustainabilityPlan_ProgressReport_hobbesec.pdf	https://www.epa.gov/sites/production/files/2018-02/site_assessment_and_utility_data_spreadsheet.xls	http://www.irecusa.org/wp-content/uploads/2015/01/San-Jose-CA-2010-RFP.pdf	https://www.epa.gov/sites/production/files/2018-02/pp_evaluation_matrix_from_webinar.xls	https://financere.nrel.gov/financere/content/terms-service-commercial-11		EPA Green Power Community https://www.epa.gov/greenpower/green-power-communities
	Tompkins County, NY's website details renewable energy and GHG emissions reduction goals.	The City of Orlando, FL's progress report focuses on the goals, benchmarks, and action items that City offices and employees take to make the city more sustainable. See pages 10-13 for Orlando's specific solar installation goals.	Solar Site Assessment and Utility Data Spreadsheet Template	The City of San Jose, CA's RFP for solar energy installations on municipal lands and buildings	Example Solar RFP Proposal Evaluation Matrix	Commercial Solar Power Purchase Agreement (PPA) Template		

Quick Attendee Poll

Poll Question #5

Would your municipality like to be added to the Portal?

[Select One]

- a) Yes, I am already listed
- b) Yes, Please contact me about being listed
- c) No, I am not interested at this time
- d) Undecided, I need more information





NREL's City and County Solar PV Training Program

Jenny Heeter
Senior Energy Analyst

Program Overview



Module 1:

Develop your goals
and team

Module 2:

Identify Sites
and Screen

Module 3:

Complete Detailed
Site Evaluation

Module 4:

Decide on a Financial
Model and Use all
Available Incentives

Module 5:

Issue a
request-for-proposals

Posted Content

<https://www.nrel.gov/technical-assistance/local-governments.html>

Module 2: Screening and Identifying PV Projects

Introduction



Text version

Training



Text version

Case Study



Text version

REopt Demo



Text version

Download [Module 2 Presentation](#)

- Goal Setting and Clarification
- Screening and Identifying PV Projects
 - Including REopt Lite demo
- Detailed Site Evaluation, Project Validation, and Permitting

Upcoming Content

- PV & Resilience
 - System Advisor Model 101 Training
 - Policies and Incentives
 - PV Finance and Procurement
 - Municipal Solar RFP Template
-
- Check the website or contact me (jenny.heeter@nrel.gov) if you'd like to be notified when new resources are posted.

Q&A Session

Questions?

- James Critchfield, U.S. EPA (Critchfield.James@epa.gov)
- Jenny Heeter, NREL (Jenny.Heeter@nrel.gov)

Portal Website: <https://www.epa.gov/repowertoolbox/local-government-solar-project-portal>

Submit your municipal goal to get listed: EPASolarPortal@erg.com

