

SOLAR

MAP

Municipal
Assistance
Program

Agenda

- ❖ What is the CT Green Bank
- ❖ Solar MAP program
- ❖ Green Bank Solar PPA
- ❖ Next Steps



Connecticut Green Bank



Help ensure Connecticut's energy security and community prosperity by realizing its environmental and economic opportunities through clean energy finance and investments.



Support the Governor's and legislature's energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development

Solar MAP Team



A quasi-state agency and trusted partner to municipalities, is using solar to put towns and cities in charge of their energy costs. With the Green Bank's 'Green Bank Solar PPA,' municipalities can go solar, enjoying peace of mind and other benefits.







CSW Energy

CSW Energy is experienced in working with municipalities to develop solar PV projects. Now Green Bank is working with CSW Energy to help municipalities to analyze their portfolio of buildings and identify opportunities for solar, get connected with a contractor, and access attractive financing through Solar MAP.

Less work. More benefits. Now even easier for towns and cities.

- Makes it even easier for municipalities to access renewable energy and achieve energy savings using the Green Bank Solar PPA
- Provides technical assistance support that simplifies every step of the process



- 1 **Engage.** The Solar MAP team will meet with you to understand your municipality's goals, gather information and identify key participants, and explain the Solar MAP process in more detail.
- 2 **Design.** Using the information you provide, the Solar MAP team will perform analysis of municipal sites, review energy demand, and develop system designs.
- 3 **Review.** The Solar MAP team will solicit proposals from qualified solar contractors on behalf of the municipality, and guide the municipality through the review of proposals and negotiation of the best terms.
- 4 **Execute.** Once a proposal has been selected, the Solar MAP team will lead the municipality through the process of executing on the proposal and realizing its goals for installing solar on municipal properties.

What is a Power Purchase Agreement (“PPA”)?

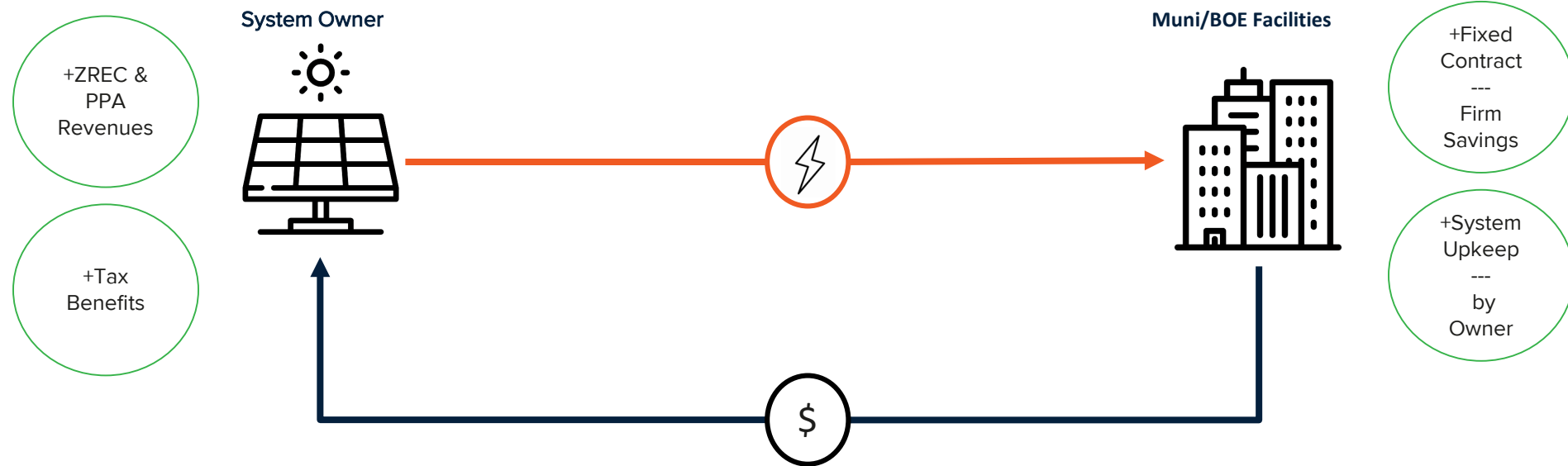


**Contract between
Seller (generates
electricity) and
Buyer (purchases
electricity)**

**Green Bank is
Seller: Oversees
development,
construction, &
asset management**

**Customer is Buyer:
Purchases
electricity from
solar installed on
property**

How a PPA Works:



What are the Benefits of a PPA?

No upfront costs

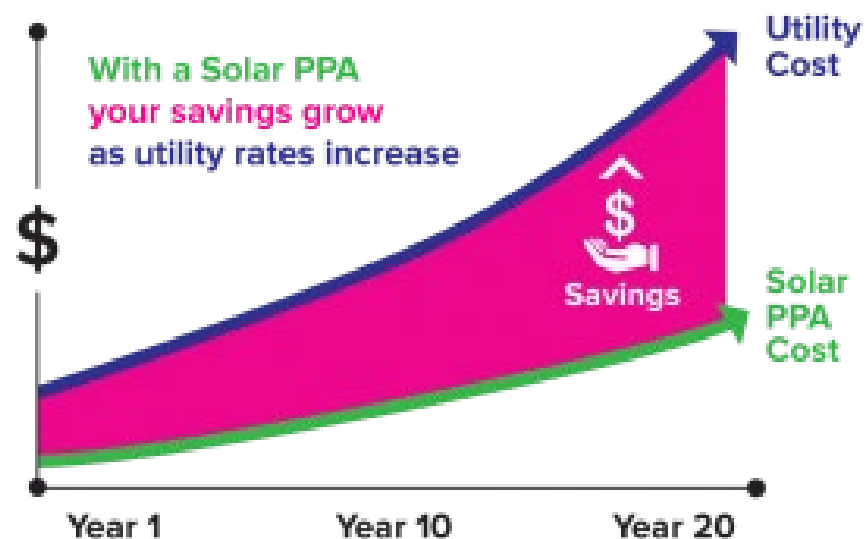
Lock in low electricity rate

Positive cash flow

No operations & maintenance costs

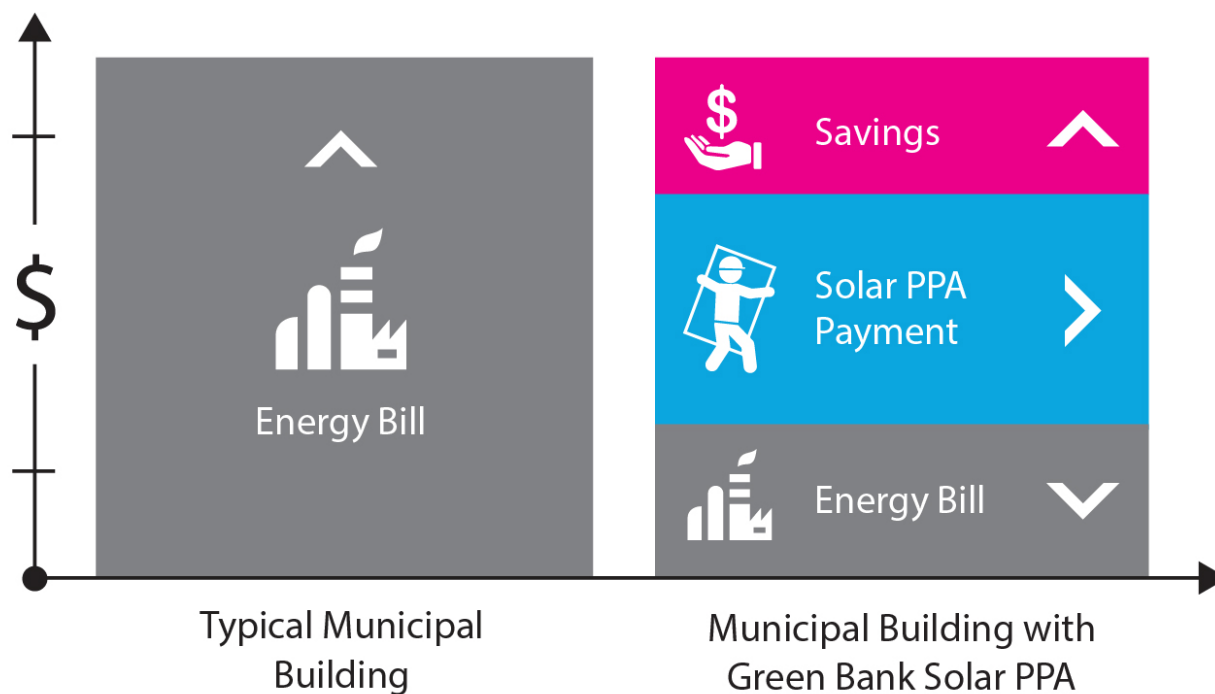
Preserve capital & credit lines

Managed by a third-party solar system owner



What are the Benefits of a PPA?

The value of solar PV comes from electricity cost savings!

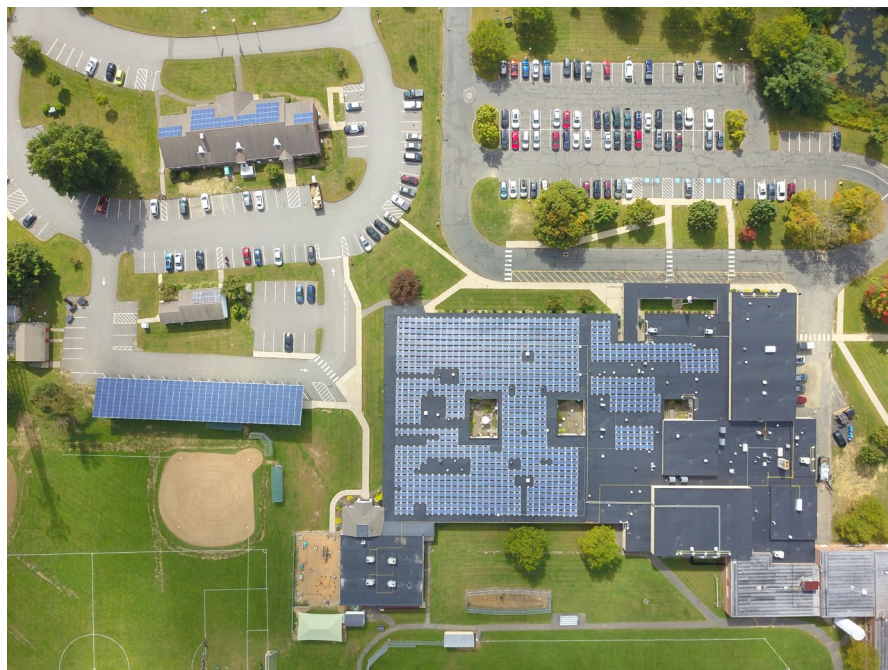


Town of Coventry: Green Bank Solar PPA Case Study



8 solar PV systems (over 580 kW) financed with the Green Bank Solar PPA

- Includes Town Hall, Police Headquarters, Radio Tower Annex, and five Board of Education buildings including schools and warehouse space
- Six roof mounted solar PV systems and two carport solar PV systems



Next Steps

	Dec	Jan	Feb	March	April	May	June	July
Initial Town Meetings								
Addresses & Utility Bills Submitted								
Pass/Fail Site Review #1								
Additional Site Info Submitted								
Pass/Fail Site Review #2								
CGB Modeling and Pricing Review								
Town Meeting(s)- site results and LOI								
! March 31 Deadline for site selection								
! April 31 st Deadline: LOI town approval								
ZREC form signed								
! Deadline for final docs								
Year 9 ZREC Auction								

- Municipal & Solar MAP Team Task
- Municipal Task
- Solar MAP Team Task

Municipal Checklist

Steps	Solar MAP	Weeks	Date Completed
1	Town Meeting #1- Solar MAP Introduction Include in meeting: Town Mayor / Manager, Representatives from Finance, Facilities, Economic Development Departments	1	
2	Receive Municipal Addresses from Town Town sends list of municipal addresses and utility bill info for CGB review	2-3	
3	Pass / Fail Site Review #1 CGB desktop review of municipal addresses suitable for solar	4	
4	Additional Site Info Collected from Town For sites that pass initial review, town sends additional info such as: 3 rd party contracts, roof/facility info	5-7	
5	Pass / Fail Site Review #2 CGB in depth review for solar suitability	8	
6	Solar Modeling and Pricing Analysis CGB develops system and pricing scope	9	
7	Town Meeting #2- Present results CGB presents site options	10	
8	Town Meeting #3- Letter of Interest Town selects sites to pursue RFP process, signs LOI	11	



Questions?

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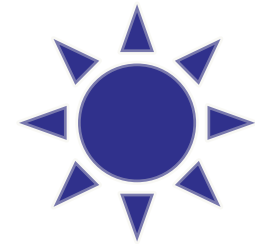
Appendix

Solar MAP Program Notes



- Geared towards municipalities who lack the resources for solar procurement internally and would require technical assistance to put solar on municipal sites.
- Behind-the-Meter Solar PV projects only for Solar MAP
- Municipalities must have a 1-on-1 meeting with municipal representatives by December to participate in this year's solar procurement.

Solar MAP Summary



Project Scope & Pre-development

Green Bank analyzes municipal sites & develops system designs

Green Bank solicits competitive proposals

Development & Engineering

Green Bank develops PPA with Municipality

Green Bank & Contractor develop & engineer project

Green Bank & **Contractor** coordinate on documentation

Construction

PPA signed between Green Bank & **Municipality**; EPC signed between **Contractor** & Green Bank

Contractor constructs project & receives construction payments from Green Bank

Operation & Payment

After Construction Complete, Green Bank operates & maintains solar system over the term of the agreement.

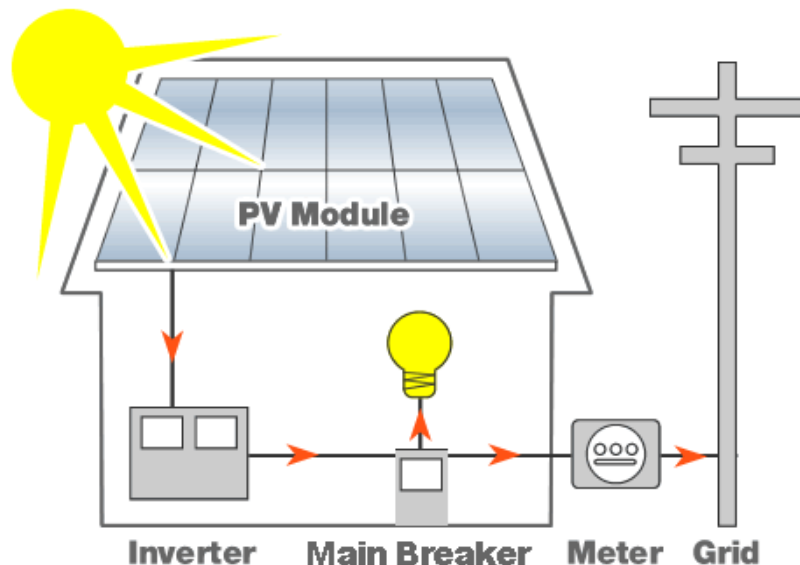
Municipality pays the PPA on a monthly “actuals” basis directly to the Green Bank

- “Actuals” = paying for exactly what is generated based off of the solar monitoring system

Solar PV systems use net metering

Solar PV systems are located **behind the meter**, meaning electricity is intended for onsite use

Net metering is a billing mechanism allowing electricity in excess of customer usage to be banked at the full retail rate and credited on an annual basis



- At year end, excess electricity generation for the year is reimbursed at wholesale rate
- Wholesale rate generally much lower than retail electricity tariff