

GROTON BOARD OF EDUCATION
SPECIAL MEETING MINUTES
FEBRUARY 7, 2022 @ 6:00 P.M.
REMOTE MEETING

Members Present: Chairperson Kim Shepardson Watson, Andrea Ackerman, Dean Antipas, Vice Chairperson Katrina Fitzgerald, Matthew Shulman, Elizabeth Porter, Rita Volkmann, Beverly Washington, Jay Weitlauf

Also Present: Susan Austin, Phil Piazza, Sam Kilpatrick, Ken Knight, Laurie LePine, Clint Kennedy, Emily Basham (CT Green Bank), Mackey Dykes (CT Green Bank)

Chairperson Watson called the meeting on the superintendent's proposed 2022- 2023 budget to order at 6:01 p.m.

I. BUDGET WORK SESSION

- Solar Panels at the Schools (**ATTACHMENT #1**) – Emily Basham of CT Green Bank gave a PowerPoint presentation on the Solar Map Municipal Assistance Program. Mackey Dykes of CT Green Bank reviewed the agreement structure. Emily Basham reviewed the next steps in the process and noted that the purchase agreements should be signed this month or next. This item was referred to the Finance/Facilities Committee for the review of the Solar Panels project.
- Support Services-Staff/General Support – Dr. Piazza reviewed the following functions of the budget:
 - 2201 Supporting Services – CO T & L
 - 2202 Diversity Equity and Inclusion (DEI)
 - 2210 Improvement of Instruction – Mrs. Washington requested a list of items funded by grants (ESSER, etc.) and what will be needed to sustain these items when the grants run out including the dollar amounts involved.
- Operations/Maintenance – Mr. Knight reviewed the following functions of the budget:
 - 2510 Operation and Maintenance
 - 2520 Pupil Transportation
 - 2540 Computer Support Services
 - 2560 Health Services Staff
 - 2710 Non-Public Pupil Transportation

II. DISCUSSION AND POSSIBLE ACTION RE: THE GRADUATION DATE AT FITCH HIGH SCHOOL

It was noted that the old law stated that the setting of the graduation date must wait until April 1. According to Representative Christine Conley, to whom Mr. Weitlauf spoke, the new law states that the graduation date may be set no earlier than the 180th day noted in the school calendar originally adopted by the Board of Education for that school year.

Special Meeting Minutes

February 7, 2022

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Consensus of the Board:

Volkman, Porter	set date as 6/17
Washington	set date as 6/17 or 6/24
Ackerman	set date as 6/17
Antipas	set date as 6/17
Shulman	set date as 6/17 and to allow Superintendent to confirm we would be legit

This item will be voted on at the Board of Education's special meeting scheduled for February 16, 2022.

MOTION: Ackerman, Antipas:

To adjourn at 8:22 p.m.

PASSED - UNANIMOUSLY



Groton

Emily Basham, Senior Manager, CT Green Bank
Mackey Dykes, VP of Financing Programs, CT Green Bank
Allen Sabins, Managing Partner at CSW Energy



CSW Energy



CSW ENERGY

A quasi-public 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.

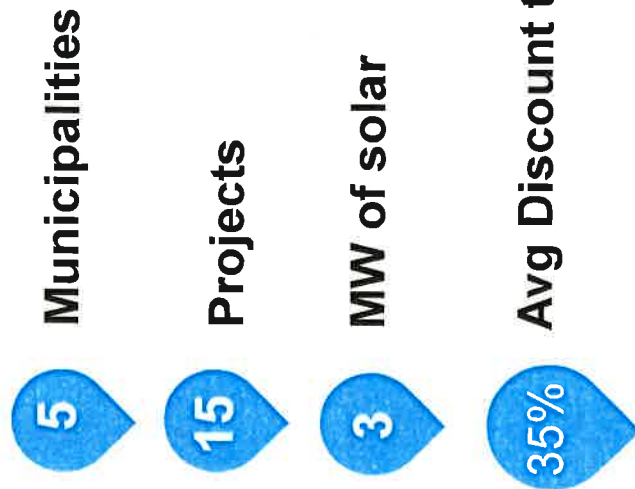
CSW Energy is experienced in working with municipalities to develop solar PV projects. Green Bank is working with CSW Energy to help municipalities to analyze their portfolio of buildings and identify opportunities for solar, get connected with a contractor.



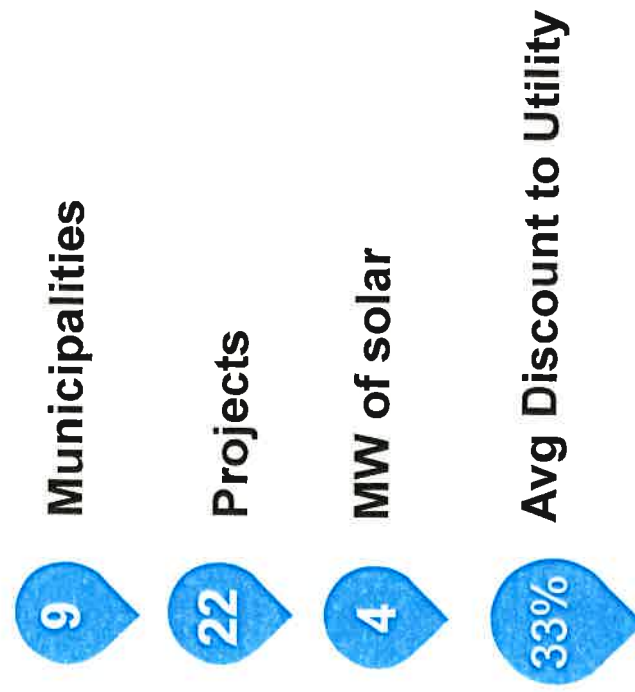
- 1** **Site Analysis.** The SolarMAP team performs an analysis on municipal sites to identify opportunities for solar projects and, working with municipal stakeholders, develops a list of onsite solar projects using the Green Bank Power Purchase Agreement (PPA).
- 2** **Project Development.** The SolarMAP team conducts site visits, develops system designs and secure the utility incentives (ZRECs) needed for each project to delivery energy cost savings.
- 3** **Competitive Partner.** Once utility incentives are secured, the SolarMAP team will solicit proposals from qualified solar contractors and select the best proposal.
- 4** **Execute.** With utility incentives and a construction partner, the SolarMAP team will present final project specs and pricing to execute the PPA and begin construction of the solar project(s).



Round 1



Round 2



Green Bank Solar PPA BOEs and Municipal



- Ashford
- Bethany
- Bloomfield
- Branford
- Bridgeport
- Chaplin
- Coventry
- Darien
- Deep River (regional)
- Eastford
- Easton
- Ellington
- Essex
- Fairfield
- Falls Village
- Hampton
- Harwinton (regional)
- Lebanon
- Manchester
- Mansfield
- New Fairfield
- New Haven
- Newtown
- Orange
- Portland
- Ridgefield
- Salisbury
- Union
- Voluntown
- Woodbridge

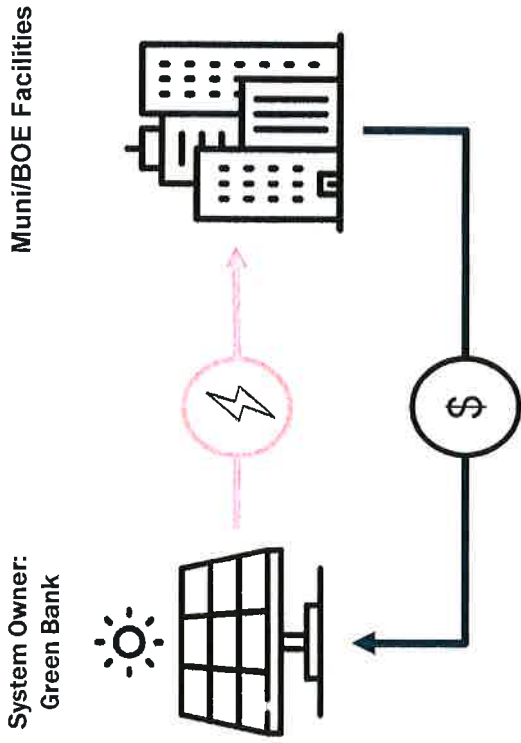


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Power Purchase Agreement (PPA)



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



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

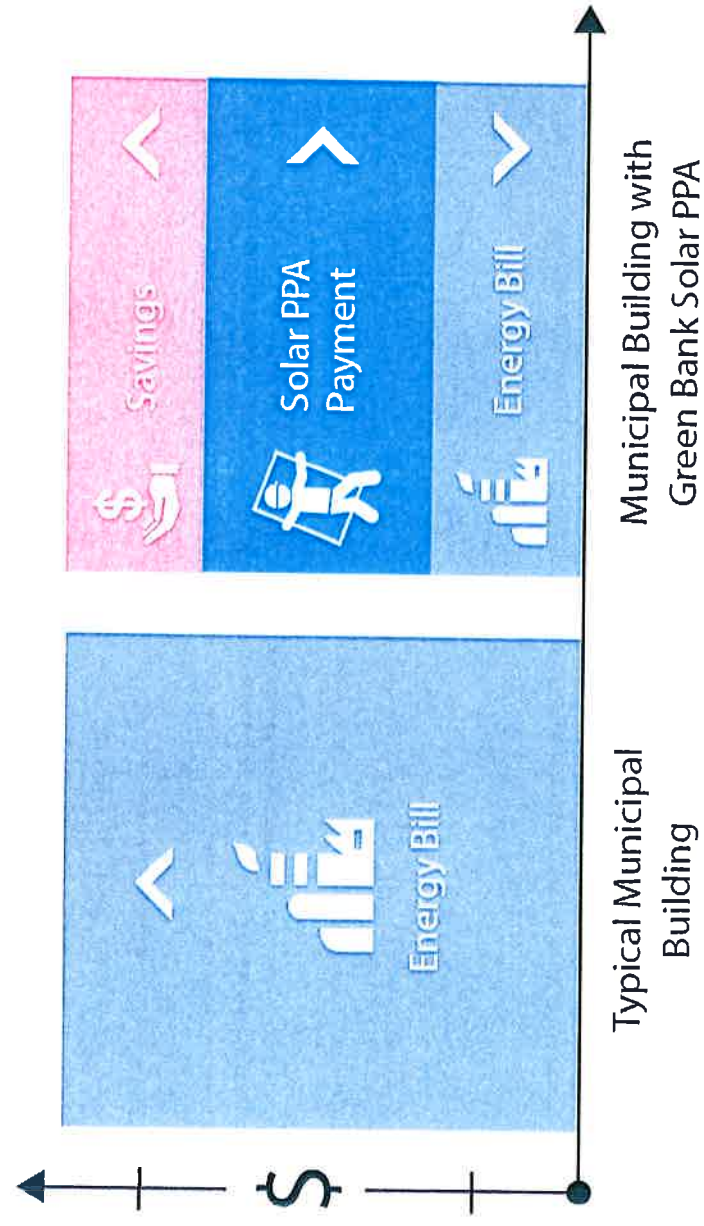
Green Bank is Seller: Oversees development, construction, & asset management

Municipality is Buyer: Purchases electricity from solar installed on property

What are the Benefits of a PPA?



The value of solar PV comes from electricity cost savings!

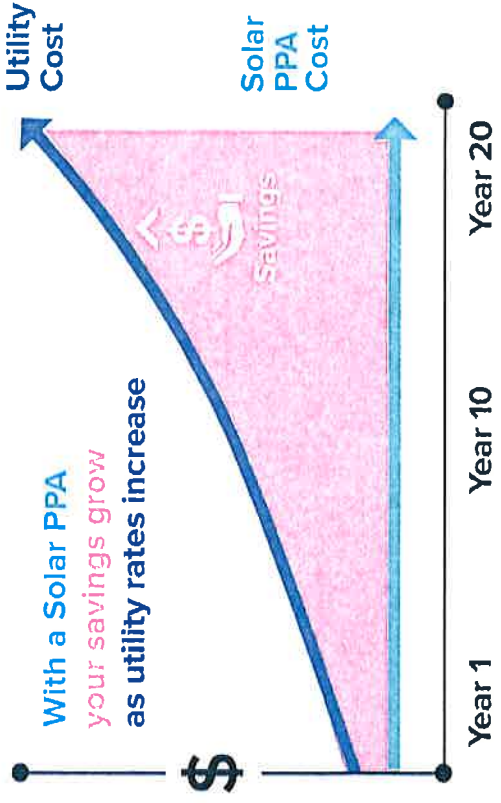


*Representative project for illustrative purposes only

What are the Benefits of a PPA?



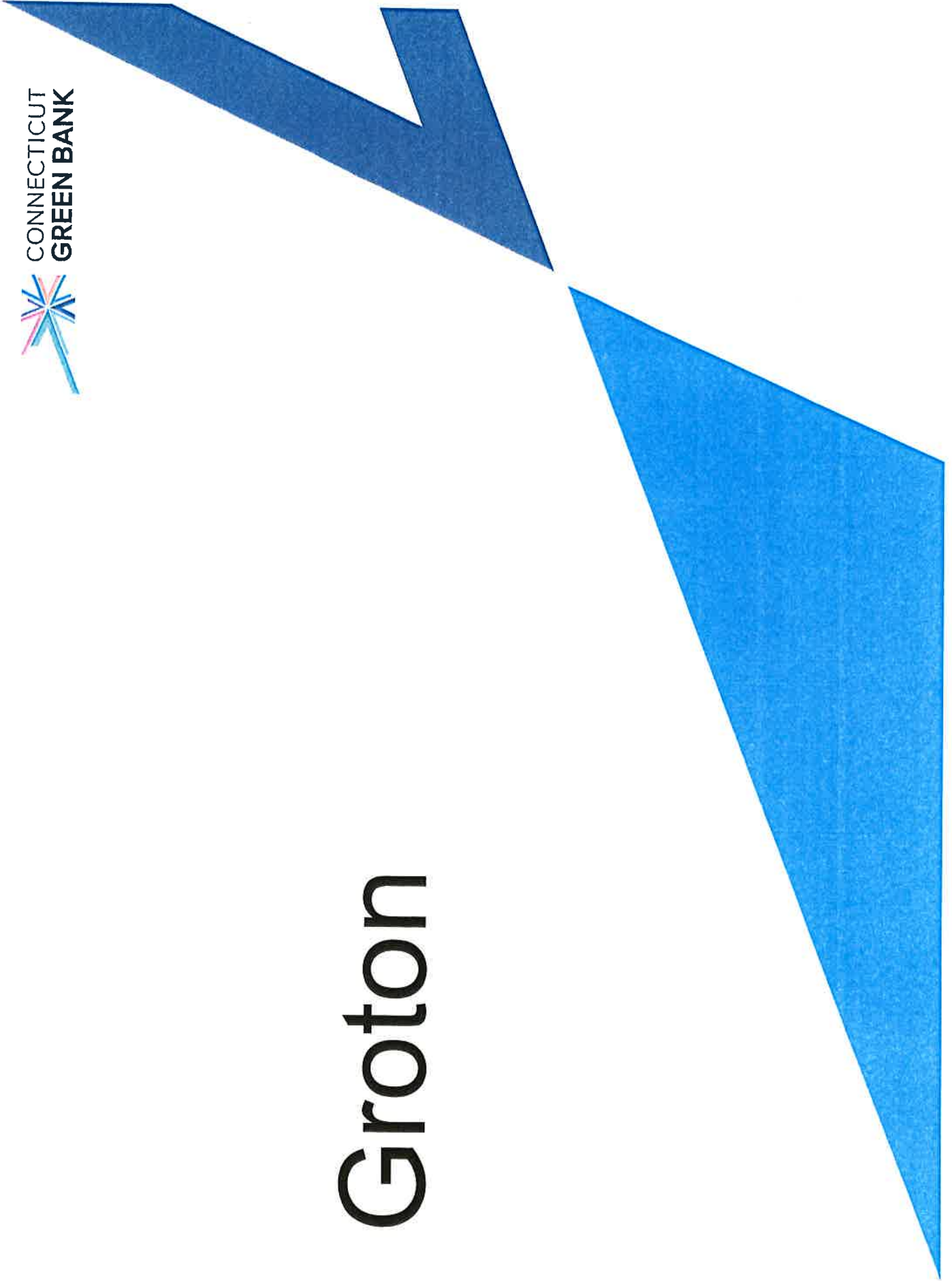
- No upfront costs
- Lock in low electricity rate
- Positive cash flow
- No operations & maintenance costs
- Managed by a third-party solar system owner
- Preserve capital & credit lines



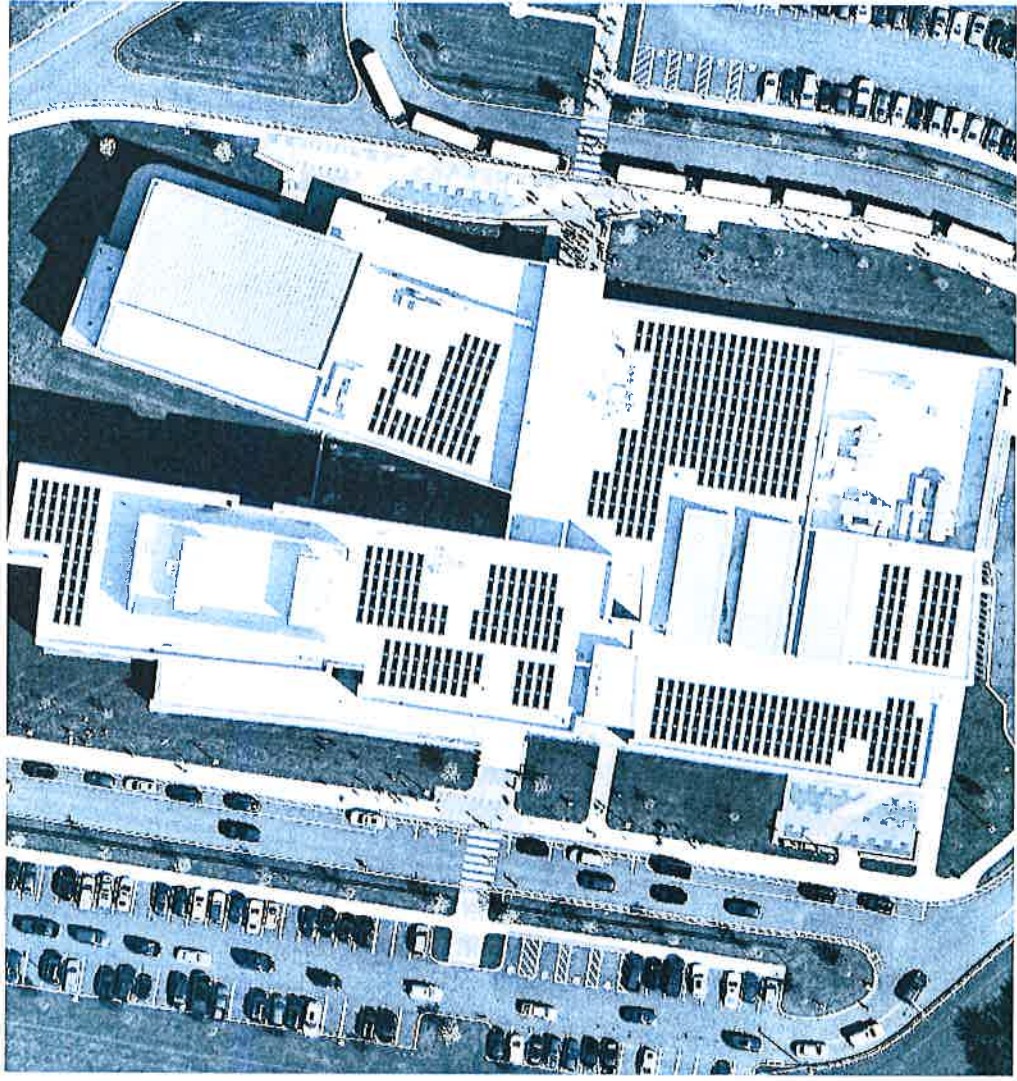
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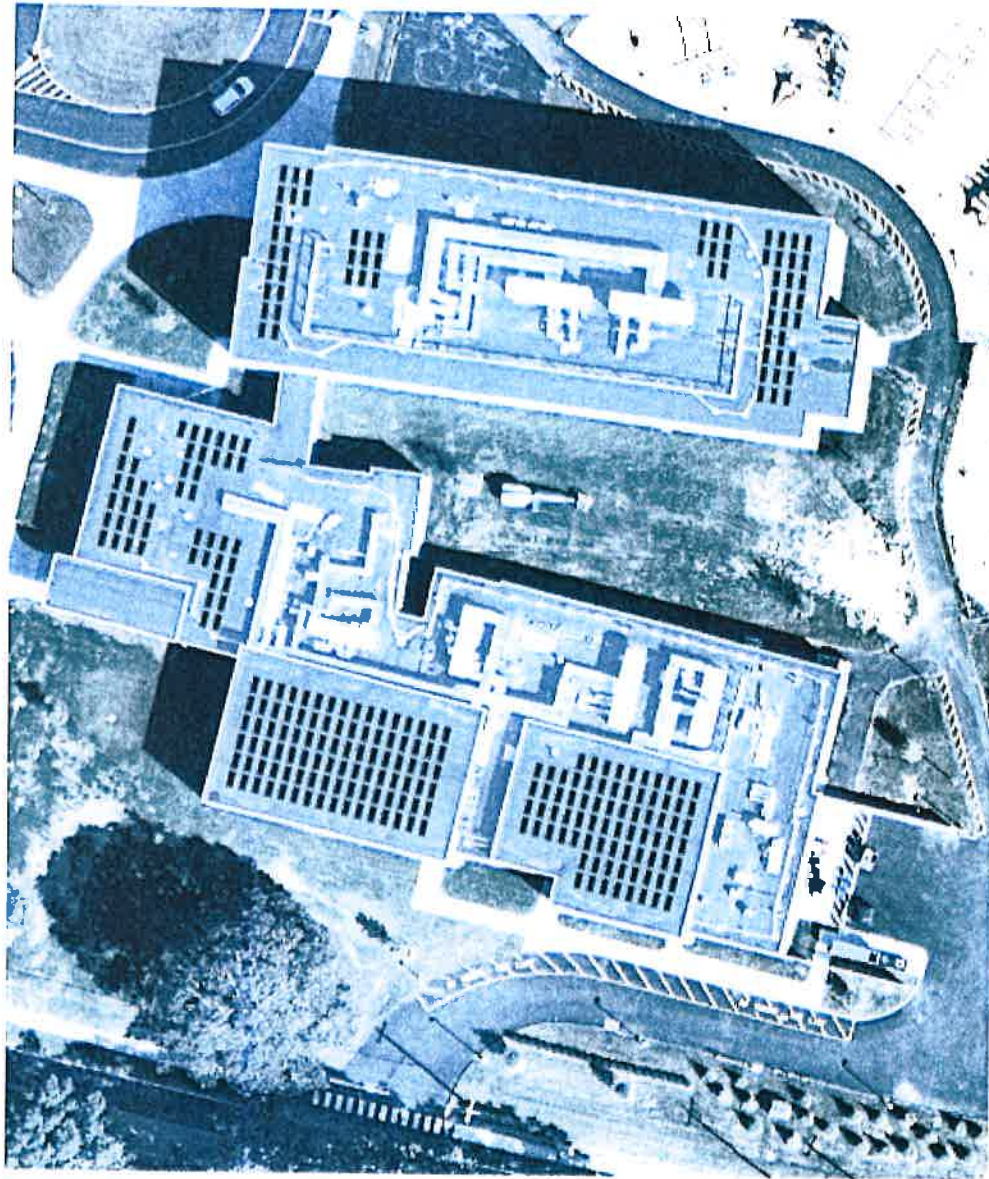


Groton Middle School



Project Details	
Project size (kW DC)	302
Estimated Annual Production (kWh)	326,922
Effective Utility Rate	\$0.099
Potential Pricing	
PPA Rate	\$0.077
PPA Discount to Utility	26%
% Solar Offset to Utility	32%

Mystic River Magnet School



Project Details	
Project size (kW DC)	147
Estimated Annual Production (kWh)	155,069
Effective Utility Rate	\$0.099
Potential Pricing	
PPA Rate	\$0.079
PPA Discount to Utility	21%
% Solar Offset to Utility	21%

Total Savings & Benefits



Final PPA rates provide discount to utility rates

Groton	Utility Rate	PPA Rate	% Discount	First Year Savings	Average Annual Savings	Term Savings
Groton Middle School	\$0.099	\$0.077	23%	\$7,477	\$13,487	\$269,733
Mystic River Magnet School	\$0.099	\$0.079	21%	\$3,236	\$6,105	\$122,103
Total				\$10,713	\$19,592	\$391,836



\$771,273 Lifetime public health value created



1,746 Tons CO2 emissions reduced, which equals:



26,191 Tree seedlings grown for 10 years



344 Passenger vehicles driven for one year or **3,980,766** miles

Next Steps



Review final PPA proposal	End of November 2021
Execute PPA	December – January
Onboard Contractor Partner	Q1 – Q2 2022
Contractor Engineering & Final Design	Q2 – Q3 2022
Town Permitting & Review	Q2 – Q3 2022
Project Construction	Q3 – Q4 2022



Questions?

Appendix

Groton Middle School

Energy Savings



Savings	
Term Savings	\$ 269,733
Average Annual Savings	\$ 13,487
First Year Savings	\$ 7,477
<i>Operations & Maintenance Cost Included</i>	

Model and Finance Assumptions	
System Size kW	302 kW
Solar Energy Generated	326,922 kWh
Annual Solar System Degradation	0.64%
Solar Energy PPA Price	\$0.077 /kWh
Solar Energy Escalator	0.00%
Utility Energy Price	\$0.09987 /kWh
Utility Energy Escalator	2.00%

Mystic River School Energy Savings



Savings	
Term Savings	\$ 122,103
Average Annual Savings	\$ 6,105
First Year Savings	\$ 3,236
<i>Operations & Maintenance Cost Included</i>	

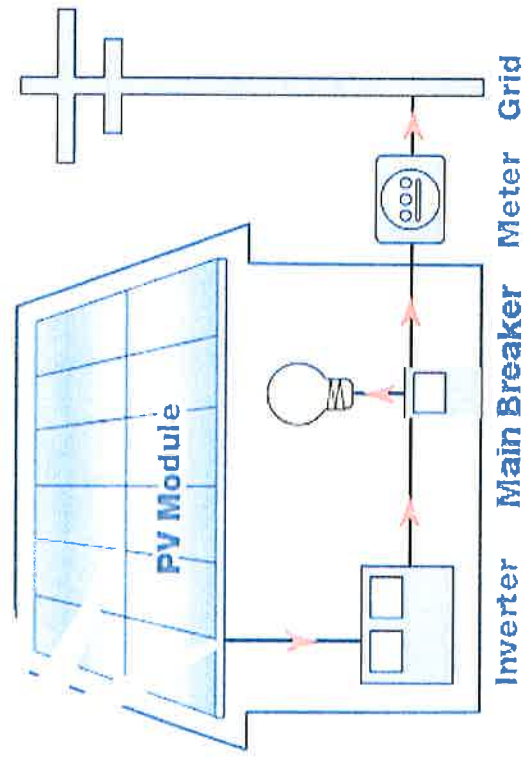
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Solar PV systems use net metering



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