



State of Connecticut  
**GreenerGovCT**

# greenergov overview

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Bureau of Energy Technology Policy – Department of Energy & Environmental Protection (DEEP)



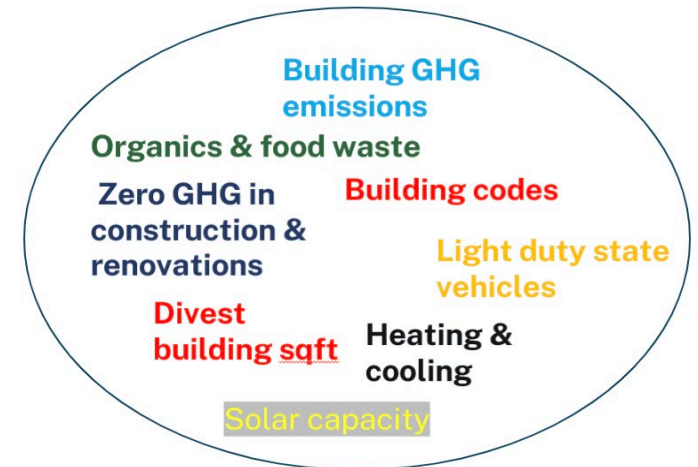
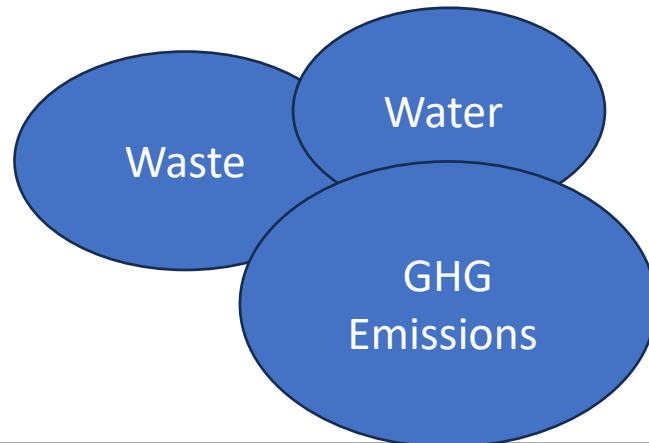
## GreenerGov History

Lead by  
Example 2011

E.O. 1 –  
April 2019

E.O.21-3 –  
Dec. 2021

Improving Energy Management  
at State Facilities





# GreenerGov Overview – Executive Order 1

In 2019 Gov. Lamont launched GreenerGov CT by signing **Executive Order 1**.

This order established a **Steering Committee** comprised of **Senior Sustainability Officers (SSOs)** from each participating agency.

The Committee is led by **three Co-Chairs**:

- The Commissioner of the Department of Energy & Environmental Protection (DEEP)
- The Secretary of the Office of Policy and Management (OPM)
- The Commissioner of the Department of Administrative Services (DAS)

## Annual Key Meetings & Deliverables

- Public Steering Committee meeting
- Annual legislative report
- Award ceremony

## The 30 Connecticut State Executive Agencies participating in EO 1 and EO 21-3 are as follows:

### Executive Branch Agency

- Agriculture Experiment Station
- CT State Library
- CT Technical Education and Career System (CTECS)
- Department Mental Health and Addiction Services
- Department of Administrative Services
- Department of Aging and Disability Services
- Department of Agriculture
- Department of Banking
- Department of Children and Families
- Department of Consumer Protection
- Department of Correction
- Department of Developmental Services
- Department of Economic & Community Development
- Department of Energy & Environmental Protection
- Department of Housing
- Department of Insurance
- Department of Labor
- Department of Motor Vehicles
- Department of Public Health
- Department of Revenue Services
- Department of Social Services
- Department of Transportation
- Department of Veterans Affairs
- Dept of Emergency Services & Public Protection
- Division of Criminal Justice
- Military Department
- Office of Early Childhood
- Office of Policy & Management
- Public Defender Services
- State Department of Education

### The following 7 non-executive agencies also voluntarily participate in achieving the EO 1 and EO 21-3 targets:

- Connecticut Housing Finance Authority
- CT Green Bank
- CT Innovations
- CT State Colleges and Universities (CSCU)
- Judicial Department
- University of Connecticut (UConn)
- UConn Health Center

# GreenerGOV Targets

## Executive Order 1

- Executive Branch agencies to achieve the following by 2030:
- 1. Reduce **greenhouse gas (GHG) emissions** by 45% below 2001 levels.
- 2. Reduce **waste disposal** by 25% from a 2020 baseline.
- 3. Reduce **water consumption** by 10% from a 2020 baseline.
- 4. Set additional sub-goals by 2030.

## Executive Order 21-3

- A. By 2024, all executive branch agency facilities, to the extent practicable, shall implement an **organics and food waste diversion program**.
- B. By 2030, all **electricity purchased and generated** by the Executive Branch will be 100% **zero carbon**.
- C. By 2030, all **newly leased light duty state vehicles** shall be **zero emission** vehicles.
- D. By 2023, DEEP and DAS shall develop a plan to **retrofit existing fossil fuel-based heating and cooling systems** at state buildings to systems capable of being operated without carbon emitting fuels.
- E. By 2023, DEEP and DAS shall develop a plan and a budget to achieve **zero-GHG emissions for all new construction and major renovations** funded by the state or in facilities owned/operated by the Executive Branch, targeting construction beginning in fiscal year 2024 and after.
- F. By 2024, the state shall **divest** 1% of all Executive Branch building **square footage**, and an additional 2% by 2028.
- G. The state shall deploy an average of **10,000 kW DC of new solar capacity annually** for the next 10 years, primarily sited new projects sited on state buildings or property.
- H. The state shall commit to **reducing** executive branch **building GHG emissions** by at least 1 % annually.

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# *Solar Marketplace Assistance Program Overview*



# Agenda

- Overview of Green Bank
- Overview of Solar MAP+ for State Agencies
- Financing Products
- Project development considerations
- Example Deliverables and Projects
- Q&A

# Mission & Vision



**Connecticut Green Bank** is the nation's first state level green bank. Established in 2011 as a quasi-public agency, the Green Bank uses limited public dollars to attract private capital investment and offers green solutions that help people, businesses and all of Connecticut thrive.

**Our mission** is to confront climate change by increasing and accelerating investment into Connecticut's green economy to create more resilient, healthier, and equitable communities.



# Investing in Vulnerable Communities

## EQUITY Investing

Investing in vulnerable communities, The Green Bank has set goals to reach 40% investment in communities that may be disproportionately harmed by climate change.



Leverage the **expertise** of the Green Bank Team who has successfully developed over 60 solar and battery storage projects to date.

Benefit from **no cost technical assistance and project development support** that simplifies every step of the process

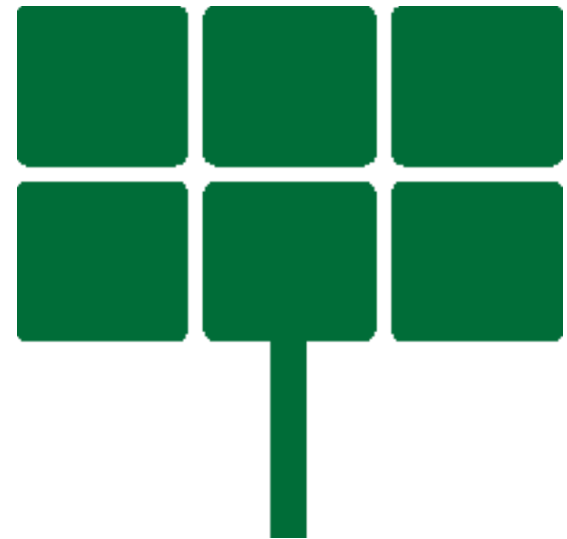
Third party ownership structure allows for ease of adoption with **zero investment required**  
Benefit from **immediate energy savings** day 1

Template contracting structure and path

Eliminates ongoing operations and maintenance responsibilities

Ensure **backup power** in case of outages with integrated battery storage

**Competitive RFP process** run by the Connecticut Green Bank for contractor selection.



# Program Steps

1

## Site Analysis

- The Solar MAP team performs an analysis of state sites to identify opportunities for solar and storage projects.

2

## Project Development and Execute.

- The Solar MAP team gathers preliminary site information, conducts site visits, provides a high-level system designs and financial modeling for review and evaluation by the State Agency
- The State Agency executes a power purchase agreement for the specified project.

3

## Secure Partners & Funding.

- The Green Bank submits for the NRES incentive and runs a competitive RFP for selection of a contractor to perform engineering, procurement and construction of the system.
- The Green Bank also runs an RFP for financing ownership of the system.

4

## Construct & Energize.

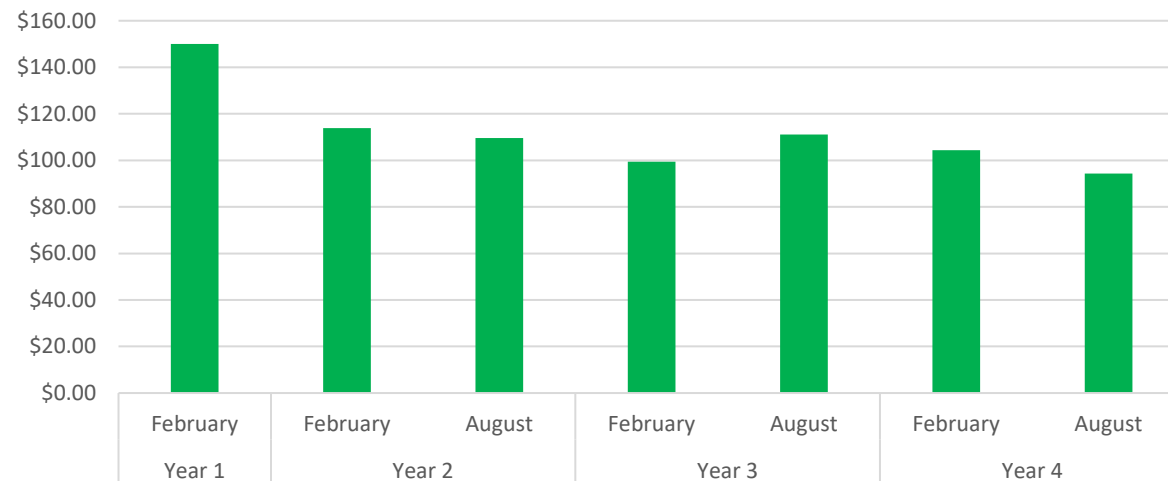
# Secure Competitive State Solar Incentives



## CT's State Solar Incentive Program: Historic NRES Bid Results (Large) Netting + Buy All Tariff

RFP Event	Month	Highest Awarded Evaluated Bid Price
Year 1	February	\$150.00
Year 2	February	\$113.80
	August	\$109.60
Year 3	February	\$99.36
	August	\$111.12
Year 4	February	\$104.40
	August	\$94.39

Highest Awarded Evaluated Bid Price



# Administer Competitive Solicitations



Project Name	CTECS Platt Tech System A	CTECS Platt Tech System B	CTECS Bullard Havens	CAES - CT Agricultural Experiment Station	DAS Wethersfield Wolcott Hill	DAS Buckingham St Garage	DAS Morgan St Garage	DAS 340 Capitol Ave	DCF Solnit North	OPM Rentschler	DOT Waterford	Totals
Project Address	600 Orange Ave, Milford, CT 06461	600 Orange Ave, Milford, CT 06461	500 Palisade Ave, Bridgeport, CT 06610	890 Evergreen Ave, Hamden, CT 06518	24 Wolcott Hill Rd, Wethersfield, CT 06109	309 Buckingham St, Hartford, CT 06106	155 Morgan St, Hartford, CT 06103	340 Capitol Ave, Hartford, CT 06106	36 Gardner St, East Windsor, CT 06088	615 Silver Ln, East Hartford, CT 06118	105 & 125 Waterford Parkway N, Waterford, CT 06385	11 Projects
Size (kW DC)	268	287	1,125	116	494	691	1,493	533	1,702	10,640	7,500	~ 25 MW
Size (kW AC)	200	200	878.9	100	400	540	999	400	1,300	(2) 4,999	4,999	
Year 1 Production Estimate	328,968	348,321	1,350,000	108,069	620,988	792,175	1,659,693	641,780	1,608,000	12,487,513	9,433,470	
NRES Size	Small*	School Carve Out	School Carve Out	Small	Medium	Medium	Medium	Medium	Medium	Large & LREC	Large	
Install Type(s)	Rooftop	Rooftop	Rooftop / Carport	Rooftop	Ground Mount	Carport	Carport	Carport	Rooftop / Ground Mount / Carport	Carport	Ground Mount	

# Program History

Round 1	
Dept of Correction Projects	7
MW of Solar	8.3
Average Discount to Utility Rate	32%

Round 2	
CTECS Projects	7
DEEP Projects	2
DOT Projects	2
MW of Solar	9.4
Average Discount to Utility Rate	16%

Round 3	
Dept of Mental Health Projects	2
Dept Veterans Affairs Projects	2
MW of Solar	6
Average Discount to Utility Rate	30%

Round 4/5	
CTECS Projects	3 (Bullard + Platt System 1 and 2)
DOT Projects	1
DAS Projects	3
OPM Projects	2 (Rentschler System 1 and 2)
CAES Projects	1
MW of Solar	25.2



# Power Purchase Agreement

# What is a Power Purchase Agreement?

**No upfront costs**

**Lock in energy savings**

**Positive cash flow**

**No operations & maintenance costs**

**Preserve capital & credit lines**

**Managed by a third-party solar system owner**

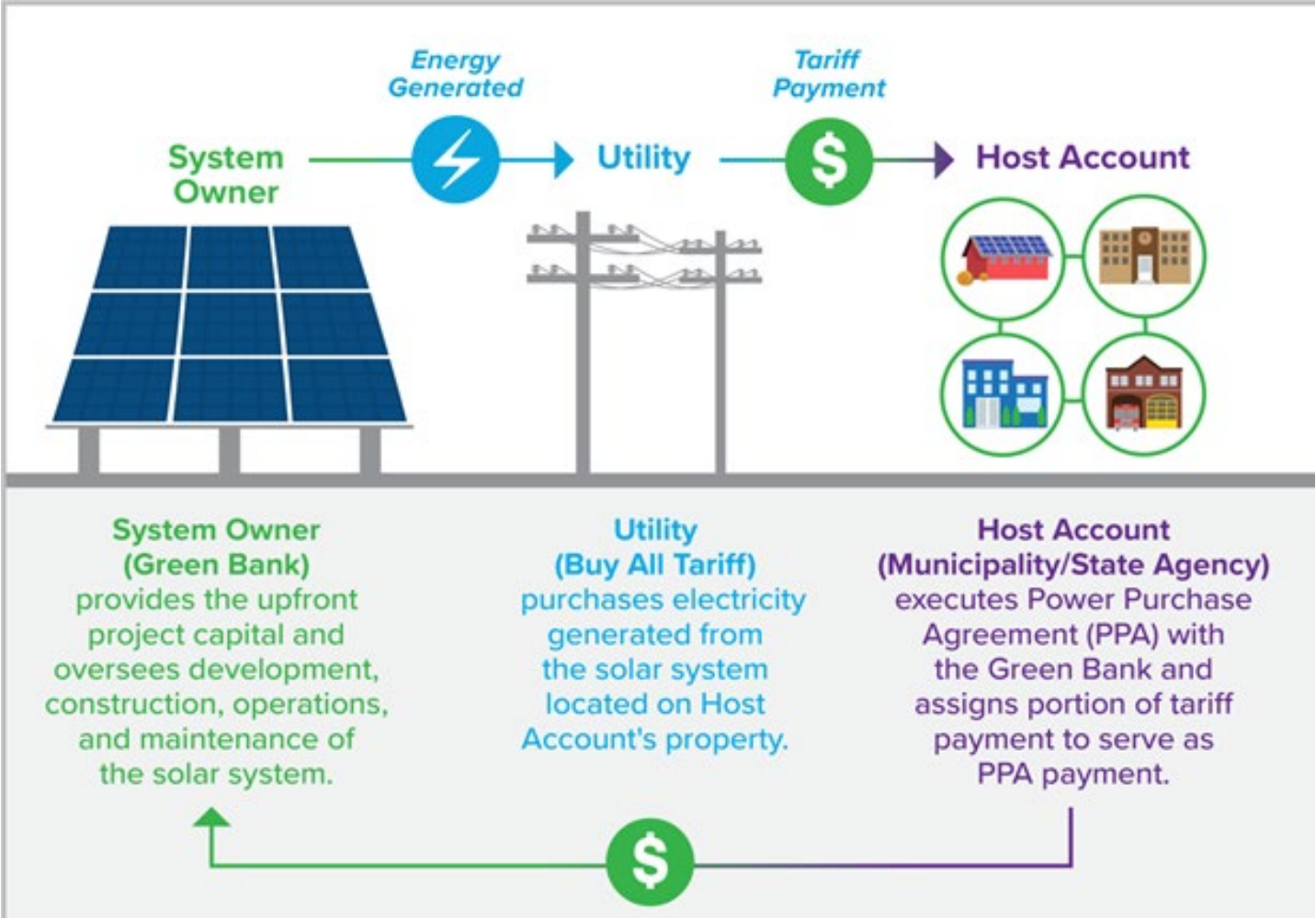
# Power Purchase Agreement (“PPA”) using the Netting Tariff

**Contract between  
Green Bank and  
State Agency**

**Green Bank owns  
the Solar: Oversees  
development,  
construction, &  
asset management**

**State Agency is  
Buyer: Purchases  
electricity from  
solar installed on  
property**

# Power Purchase Agreement (“PPA”) using the Buy All Sell All Tariff

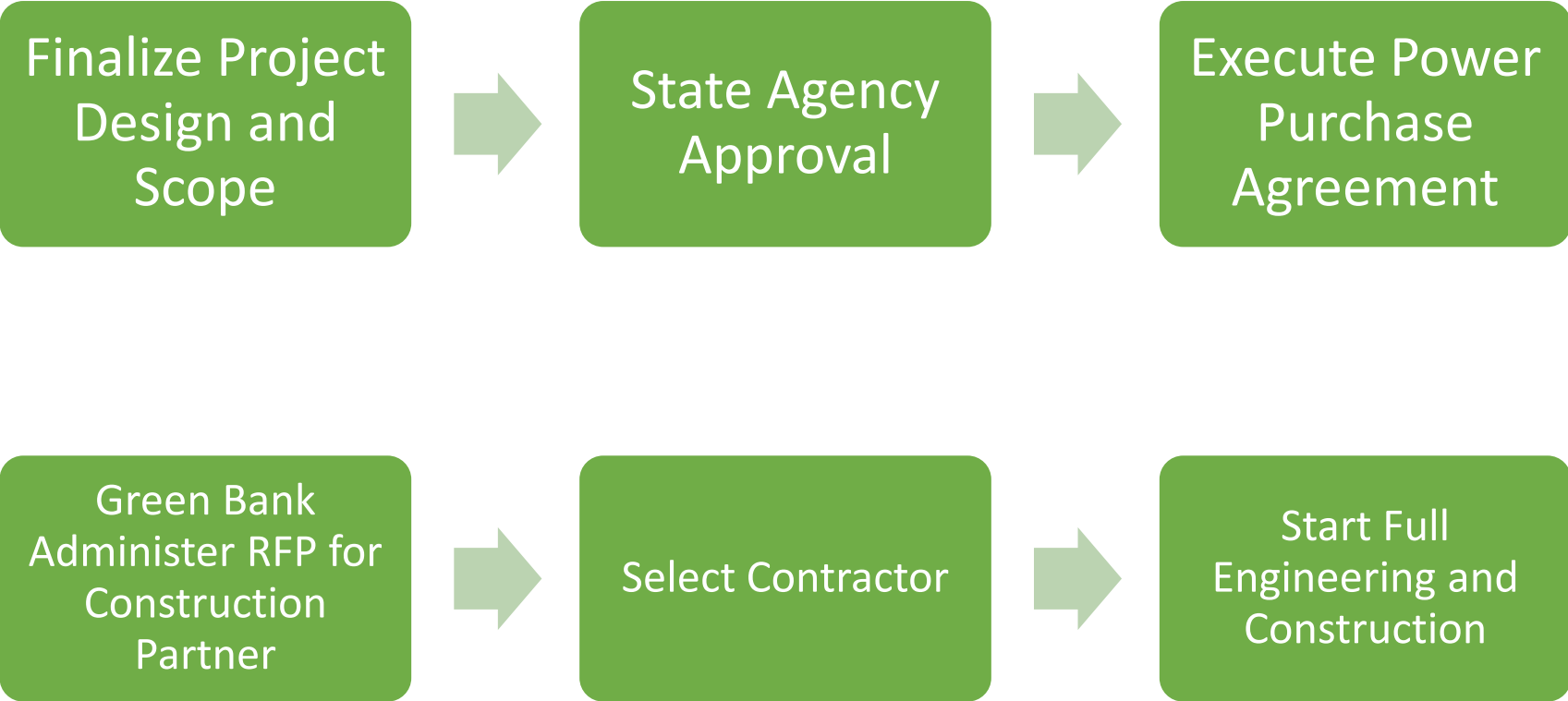


# Project Development

# Factors that impact project economics

- Roof size & condition
- Available property area
  - Site contours & wetland delineations impact project design
- Electrical service size & condition
- Building + Meter configuration
- Exposure to the sun (and therefore how much energy your system produces)
- Hosting capacity on the electric grid
- Potential Investment Tax Credit
- Inclusion of battery storage
- Required Upgrades:
  - Interconnection Upgrades & Studies
  - Structural Upgrades
  - Roof Repair or Replacement Prior to Install

# Sample Development Schedule



# Sample Construction Schedule



Steps	General Timing	Notes
<b>Engineering</b>	4 – 6 months	
Site visits		
Structural Report / Geotech Surveys		
One Line Electrical & Racking Drawing		
Permit Set		
<b>Interconnection</b>	90 Days – 1 year*	* Depends on utility required studies and study timeline
<b>Permitting</b>	30 – 60 days*	*Siting Council review can add 3-6 months
OSBI		
FM Global Review		
<b>Procurement</b>	9 – 12 months	Depending on electrical long lead equipment. Concurrent with other project steps.
<b>Construction</b>	2-4 months	Carpports require more time
Site Prep		
Array installation		
Electrical Installation		
Final Gear Installation		
OSBI Inspections		
<b>Commissioning</b>	1 month	Testing, third party inspections
<b>Energize</b>	1 month	Witness test
<b>Total</b>	12-18 months	

# Program Deliverables – DOT Waterford

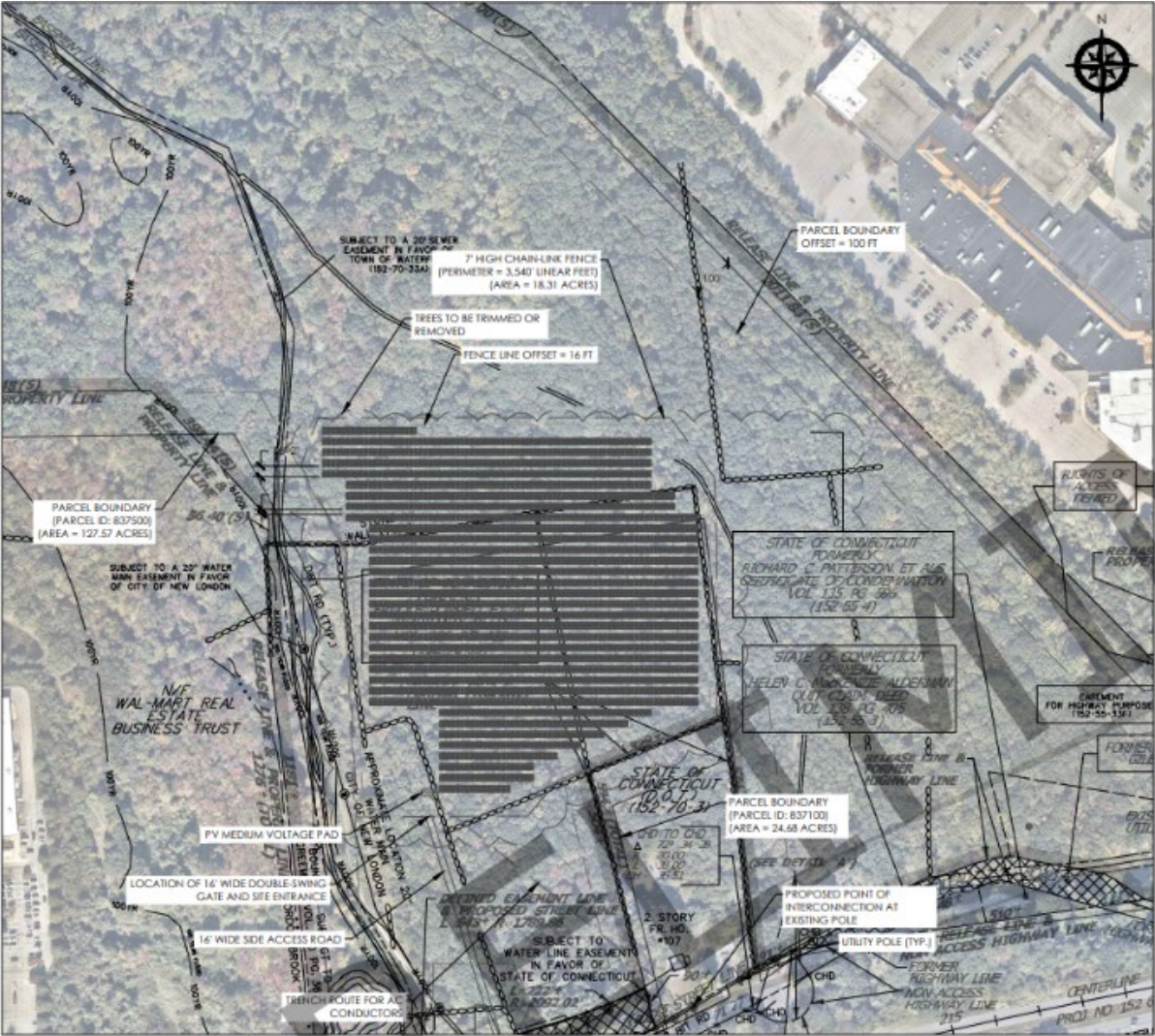
# Waterford

<b>Address</b>	Waterford DOT Parcel; 105 & 125 Parkway N, Waterford, CT 06385
<b>Anticipated Project Type</b>	Ground Mount
<b>Anticipated System Size</b>	CSW Sized at 7,500 kW DC; may drop system size to match hosting capacity
<b>Anticipated Year 1 Production</b>	9,433,470 kWhs
<b>Hosting Capacity</b>	1700 kW
<b>Distressed Municipality?</b>	No
<b>10% Low Income Bonus?</b>	No
<b>10% Energy Community Bonus?</b>	Yes



# Waterford

System Size (kW)	7,488 kW DC
Year 1 Production (kWh)	9,794,304 kWhs



# Waterford – Final Project Information



Distressed Municipality Bid Preference*	
Incentive Credit (\$/kWh)	\$0.03/kWh
Solar Production (kWh)	9,794,304.00
Year 1 Savings Estimate (Credit * Production)	\$300,000
Cumulative Savings Estimate over Contract Term (20 years)	\$5,000,000

- Incentive: **Buy All Sell All** tariff in the **Large** bucket.
- Located: **Front-of-the-Meter**
- Solar Benefit: **On-bill credit** for Waterford's portion of the incentive
- Billing: System Owner’s portion of the incentive serves as the PPA payment. DOT will not have additional billing
- PPA Payment: Paid by System Owner’s portion of the tariff paid directly to them from the Utility.

\*Eligible if all selected beneficial accounts are in a distressed municipality which include [https://portal.ct.gov/-/media/decd/research-publications/distressed\\_municipalities/2024/2024-distressed-municipalities-list.xlsx?rev=a62fa7a3c4974cd59529fb3656472f32&hash=EE29C0421DD334D4967996D20EE9C5ED](https://portal.ct.gov/-/media/decd/research-publications/distressed_municipalities/2024/2024-distressed-municipalities-list.xlsx?rev=a62fa7a3c4974cd59529fb3656472f32&hash=EE29C0421DD334D4967996D20EE9C5ED)

# Timing Considerations – Incentive Phase Out

- **With the signing of the One Big Beautiful Bill (OBBBA) on July 4th, 2025 the investment tax credit (ITC) for solar is effectively being phased out.**
  - Projects that start construction or safe harbor between 1/1/26 to 7/4/26: Preserve ITC, FEOC applies, but existing in-service timelines remain.
    - Sites should target connecting with the Green Bank **no later than 5/1/2026** if there is interest in pursuing a project and preserving the ITC.
  - Projects that start construction after 7/4/26: FEOC applies. Must be placed in service by 12/31/27 to capture ITC, FEOC applies.
- **Final Year of CT State Solar Incentive (NRES) 2027**
  - Year 6 of the 6 year program offering a rich incentive and established framework
  - Successor program structure is not yet known
  - Important to start predevelopment in 2026 to position for participation
- **Interconnection Hurdles**
  - First-come, first-reserved. Available grid capacity to host solar projects is limited, especially for larger solar projects
  - Important to get applications into utility queue as soon as possible.

# CT Technical Education and Career Systems (CTECS)

Henry Abbott THS



Cheney THS





## Quinebaug Fish Hatchery

145 Trout Hatchery Road, Plainfield, CT  
06374

316.8 kW dc  
250 kW ac  
409,086 kWh year 1



## Kensington Fish Hatchery

120 Old Hatchery Road Kensington, Berlin,  
Connecticut 06037

132 Kw  
100 kW ac  
169,961 kWh – year 1

# Questions & Answers



Contact:

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860-258-7839

Katie Shelton, Senior Manager, CT Green Bank

[Katie.Shelton@ctgreenbank.com](mailto:Katie.Shelton@ctgreenbank.com)

860-785-9625

Link to schedule a meeting:

<https://calendly.com/d/5j7-3jf-vyj/intro-call-solar-map-affordable-multifamily-solar>





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**Thank you for attending today!**

