

TO: Supervisor Ed Lachterman, Town Board, Town of Yorktown

FR: Leo Wiegman, Director, Solar Programs

CC: Noam Bramson, SW Executive Director, Diane Quast, Town Clerk

RE: The growing demand for Community Solar in Yorktown

Date: May 30, 2024, sent by email.

Dear Supervisor Lachterman and members of the Town Board:

We write to provide some brief information about solar energy in Yorktown including both installations on properties in Yorktown and interest among your constituents in enrolling in community solar where they may not be able to install solar on their own properties.

We hope this information may provide you with some context as you deliberate the revision of Yorktown's existing local law for solar infrastructure.

1. Why do people subscribe to community solar?

While part of the motivation may be to support the deployment of renewable energy projects, the number one reason that we hear is the guaranteed monthly savings that are available for the 20+ year life of the community solar project. This is especially true for low- or fixed-income subscribers.

2. How many customers in Yorktown currently are benefiting from community solar subscriptions?

Currently, Sustainable Westchester has **419 community solar subscribers from Yorktown**, including a number on fixed income, such as Jefferson Village residents. The actual number is likely higher, because other customers may have subscribed using a different service from ours. Most of our Yorktown subscribers signed up when Sustainable Westchester teamed up with then Supervisor Matt Slater to actively promote the opportunity to enroll in community solar.

3. Why is there a waiting list for community solar subscribers?

Sustainable Westchester has a waiting list of at least **120 Yorktown residents and small businesses** who want to subscribe to community solar. However, every community solar project in the ConEdison territory currently permitted or constructed is fully subscribed. There is some available capacity for NYSEG customers from community solar projects located in that utility service territory. But these fill as rapidly as they become available.

N.B.: It is important to note that, due to a lack of new community solar projects, Sustainable Westchester has not been actively promoting enrollment for more than 2 years, especially for ConEdison customers. In other words, the 120 Yorktown customers in our waiting list is an organic accumulation of interest, not due to any outreach from us to the community. An active outreach would likely generate hundreds more potential subscribers, especially from areas such as Jefferson Village.

4. What is Yorktown's annual electricity use?

According to New York State UER data, all the electricity accounts in Yorktown combine for a use of 263,000 megawatt-hours per year. Of this total, circa 60% is consumed by ConEdison accounts and circa 40% is used by NYSEG accounts. (See table below.) Electricity use in 2023 grew slightly (1.4%) over 2022.

	ConEdison (c. 8,300 accounts)		NYSEG (c. 6,200 accounts)	c. 14,500 accounts		
year Total Consumption (MWh)		% of total	Total Consumption (MWh)	% of total	Grand Total (MWh)	
2022	146,907	57%	112,051	43%	258,958	
2023	153,655	59%	108,941	41%	262,596	

Source: https://data.ny.gov/Energy-Environment/Utility-Energy-Registry-Monthly-ZIP-Code-Energy-Us/g2x3-izm4/about_data, Filtered: For Electricity, Westchester County, Accessed: 2025-05-11

5. How much solar is there in Yorktown?

To date, since 2003, when NYSERDA's solar incentive programs began, the entire installed solar (photovoltaic) capacity completed or in the pipeline in Yorktown is 35.7 megawatts DC. If all the projects in the pipeline are completed, that annual generation capacity produces over 40,000 megawatt-hours per year. (See table below.)

The residential and non-residential (commercial) systems below are 'behind the meter' installations that feed the on-site load of the home or business. The Community Solar projects inject their energy into the grid for distribution to subscribers who do not have solar on their own home or business.

Solar systems in Yorktown

Туре	Count	Total capacity (MWdc)	Total annual energy (MWh/year)
Residential	657	6.7	6,429
Non-residential	21	5	5767
Community solar	10	24	28,043
Totals	688	35.7	40,239

Source: https://data.ny.gov/Energy-Environment/Solar-Electric-Programs-Reported-by-NYSERDA-Beginn/3x8r-34rs, Filtered for: Westchester County, Accessed: 4/30/2025

6. Is building solar cost effective?

Building solar is very cost effective, especially when a conservative 20-year lifespan of solar production is considered. The levelized cost of solar electricity is between \$0.10 and \$0.20 per kilowatt-hour. The table below shows the total investment in each type of solar system in Yorktown, and the sum of annual energy production (kWh/year). In year 1, each kilowatt-hour produced that year has a cost of between c. \$2 and \$4. Installing a solar system means prepaying for a 20+ year supply of electricity. (See table below.)

Hence over 20 years, the levelized cost of energy drops dramatically to well below the cost today from either ConEdison or NYSEG. Economies of scale help the larger projects deliver a lower life-time cost of energy.

Yorktown PV	Total \$ investment before incentives	Expected kWh annual production	\$ per kWh in year 1	\$ per kWh (over 20 years)	
Community solar	\$ 57,877,061	28,043,249	\$ 2.06	\$ 0.10	
Non-residential	\$ 14,348,575	5,767,675	\$ 2.49	\$ 0.12	
Residential	\$ 25,512,925	6,428,103	\$ 3.97	\$ 0.20	
Sum / average	\$97,738,561	40,239,027	\$ 2.43	\$ 0.12	

Source: same as above.

7. How much of Yorktown's consumption is generated locally?

Assuming the entire solar pipeline is constructed, 24% of the annual total electricity consumed in Yorktown would be generated locally: 40,239 MWh/year generated of 282,596 MWh/year consumed. That equates to about **14% of today's use**. If Yorktown wanted to generate 100% of today's electricity consumed, it would have to increase the solar generation capacity 700%.

8. What is the workforce development impact of building solar?

About 30% of the total investment in solar is spent on labor, with 40%-45% of the investment representing material and the balance representing all the other costs of doing business. The total investment in the above table of \$97.7 million represents **about \$30 million in labor**. Depending on project size, 30-to 50% of that labor is for actual local construction with the balance devoted to staffing all the other business functions. In other words, building solar systems creates good paying jobs for the local labor force.

9. Can community solar be located on rooftops?

Yes, absolutely. During the public hearing, I believe I may have stated that 20,000 square feet (one half acre) of roof is about the minimum for a small community solar project. That was true a few years ago. The roof area that is needed for a viable project has grown as the New York State incentives have fallen. In checking with solar developers who do roof-top community solar, the preferred roof area is **50,000 square feet to 100,000 square feet (2 to 4 acres)**.

10. Would the former Turco's building be a potential roof-top community solar site?

Maybe. The former Turco's Market building has roof of about 29,000 square feet. However, due to roof-mounted equipment, the area available for a solar array would be smaller, in addition to allowing the mandatory fire access walkways. In short, a community solar project needs a few acres of either roof-top or ground or parking lot canopies to have sufficient economies of scale to be viable. There is certainly enough space on the ex-Turco's roof to provide the store's new tenant with ample solar electricity (over 200,000 kilowatt-hours per year). (See the attached pdf with a solar layout we sketched for you for this building.)

After reviewing the comments that you have received and published on the draft revised local solar law, we find ourselves in close agreement with the comments from both the Yorktown Planning Board and the County Planning Board.

Finally, we want to offer our knowledge and expertise to the Town of Yorktown in assisting you with the deliberations on how best to update your existing solar law. We recognize the importance of ensuring that local concerns are met, while enabling property owners to develop valuable community assets, either to lower their own operating costs or to offer guaranteed savings through community solar projects.

Thank you,

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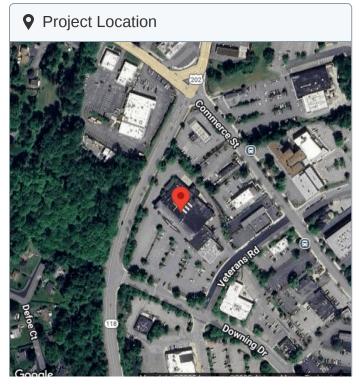
Enclosure: (1) Ex-Turcos rooftop solar sketch



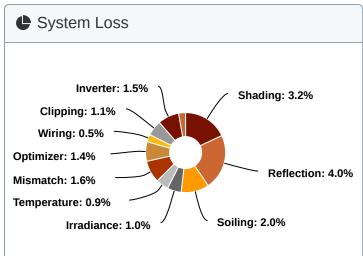
Your Solar Potential

Prepared for

Ex-Turco's Market



■ Project Details					
Address	380 Downing Dr, Yorktown Heights, NY 10598, USA				
Owner	Leo Wiegman				
Last Modified	Leo Wiegman 2 minutes ago				
Location	(41.275492799999995, -73.7831781) (GMT -5)				
Profile	STAAMP flat roof ballasted				



■ System Metrics						
Design	Design 1					
Module DC Nameplate	170.0 kW					
Inverter AC Nameplate	150.0 kW Load Ratio: 1.13					
Annual Production	205.7 MWh					
Performance Ratio	83.6%					
kWh/kWp	1,209.6					
Weather Dataset	TMY, 10km Grid (41.25,-73.75), NREL (prospector)					
Simulator Version	ad50c1174b-940959c136-8f556f6b4a- a4f8e6621e					

■ Solar Access by Month												
Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
flat roof 0	95%	96%	96%	97%	97%	97%	97%	97%	97%	96%	96%	94%
raised area	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Solar Access, weighted by kWp	94.7%	95.9%	96.6%	97.1%	97.4%	97.5%	97.4%	97.2%	96.9%	96.3%	95.7%	94.5%
AC Power (kWh)	8,974.7	11,955.2	17,827.1	19,928.8	24,272.6	26,843.8	25,355.5	22,131.9	18,618.4	13,328.1	8,836.2	7,615.3

Your Preliminary Solar Layout for

380 Downing Dr, Yorktown Heights, NY 10598, USA

■ Field Segments											
Description Racking Orientation				Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power		
flat roof 0	East- West	Landscape (Horizontal)	5°	223°	1.0 ft	1x1	151	302	164.59 kW		
raised area	East- West	Landscape (Horizontal)	5°	223°	1.0 ft	1x1	5	10	5.45 kW		

Major Equipment PV module:

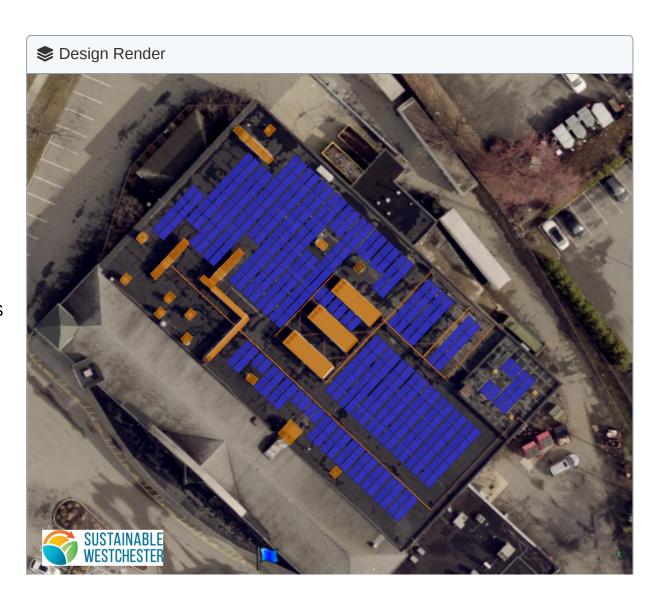
(312)

VSUN VSUN545-144BMH-DG (2022), 545.00 W

PV Inverter:

(5)

SolarEdge SE30KUS (USE-SIN-USR0IBNS6) -Domestic Content, 30.00 kW



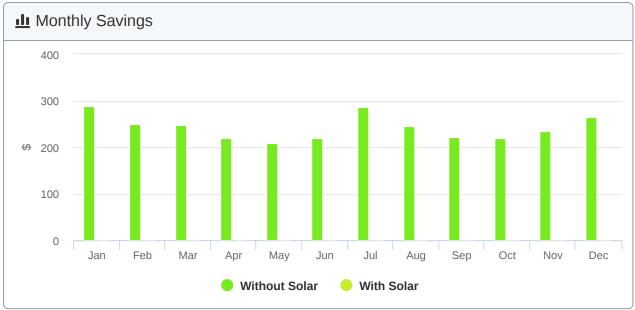
Questions?

We are here to help every step of the way! Leo, Carmen and Enrique at solar@sustainablewestchester.org

Your Preliminary Solar Energy versus Consumption for

380 Downing Dr, Yorktown Heights, NY 10598, USA





Average annual electric bill pre-solar

\$2,902.47

Average annual electric bill post-solar

-\$25,893.79

Annual savings from solar

\$28,796.26





Commercial Solar & Battery Incentives (As of May 2025)

New York State Incentives

NY Sun Commercial Incentive

- ConEdison Region Non-residential (0-1000 kWdc) Megawatt Block 3: \$0.60 per watt
- ConEdison Region Non-residential (1000+ kWdc) Megawatt Block 1: \$0.50 per watt
- Upstate (NYSEG) Region Non-residential Megawatt Block 10: \$0.25 per watt

NY State Battery Storage Incentive

- Based on battery capacity (in \$/kWh).
- Available through approved NYSERDA contractors.
- First-come, first-served; varies by region.
- Dashboards track remaining funds and incentive rates.

NY State Sales Tax Exemption

- 100% exemption from New York State sales tax on solar and storage systems.
- Some local municipalities also waive local sales tax.

Federal Incentive:

Clean Energy Investment Tax Credit (IRS)

- Base Credit: 6% 30% (depending on project status and labor factors)
- Domestic Content Bonus: 10% additional; Energy Community Bonus; 10% additional; Low-Income Community Bonus: 10% additional; Low-income Residential Building or Low-Income Economic Benefit Bonus: 20% additional