V.H. Energy

Become Independent

October 8, 2025

Environmental Planner
York Town Hall
Second Floor
186 York Street
York, ME 03909

To Whom It May Concern,

Thank you for the opportunity to bid on the York Village Fire Station roof mounted solar PV array project.

V.H. Energy proposes to install a 25.6 KW solar photo voltaic system at the York Village Fire Station in York, ME. A 64 ZnShine 400W panel system will be installed on the south facing roof of the building. Additionally, the system will also consist of a SolarEdge inverter(s), and each ZnShine module will be serviced by an individual power optimizer. The power from the solar inverter(s) will then be fed into the electric service panel. We estimate that this system would potentially offset approximately 32,000 kWh annually. If your current power consumption were to remain the same, a 25.6 KW system will offset around 100% of that usage. All required town permits, inspection scheduling and utility interconnection application and fees are included in the system price.

Please feel free to contact me with any questions on my mobile at (603) 731-3169 or by email at vhromis@vh-energy.com.

Best,

Vladimir Hromis
Owner, V.H. Energy

System size for 25.6 KW System W/ No Batteries

Average annual cost of electricity	$	7,680.00			
Average monthly bill	$	640.00			
Utility Rate per KW	$	0.24	REC Price		
Average annual KWh		32000.00	$ 30.00		
Average monthly KWh usage		2666.67			
Orientation		195 Degrees, 8 pitch			
Solar Panel Model and Power		ZnShine 400W B/B			
Inverter Type		Solar Edge with Optimizers	No Batteries		
Hours of Sunlight in NH		4			
System Efficiency multiplier		1.16	# Panels Needed	Annual kWh Production	
Solar Panel Size in Watts		400	64	32143.36	
Suggested System Size DC		25.78			
System Size in DC Kilowatts		25.600	AditionalCost N/A		
Price per Watt DC (Solar Only)		2.7	$ -	$ -	
	System Cash Price			RECs Generated per Year	
System Price	$	69,120.00		$ 964.30	
State Rebate	$	-			
Commercial Depreciation	$	-			
Federal Tax Credit 30% (if applicable)	$	20,736.00			
Net system cost after rebates	$	48,384.00			

		Upfront System Cost	Payback period (net cost/utility bill)	Monthly Payment after applied incentives	Monthly Payment before applied incentives	Loan term (years)	nterest Rat	Intrest Paid
Cash Price	$	69,120.00	6.3 years					

YORKFIRESTATION

Firehouse Drive 1, York, Maine, 03909, United States | Oct 2, 2025

SYSTEM OVERVIEW

64 PV modules | 2 Inverters | 64 Optimizers

FINANCIAL OVERVIEW

System Price

$ 69,120

SIMULATION RESULTS

Installed DC Power	Max Achieved AC Power	Annual Usable Solar Production	Annual CO_2 Emission Saved	Annual Equivalent Trees Planted
25.60 kWp	20.00 kW	35.71 MWh	25.24 t	1,159

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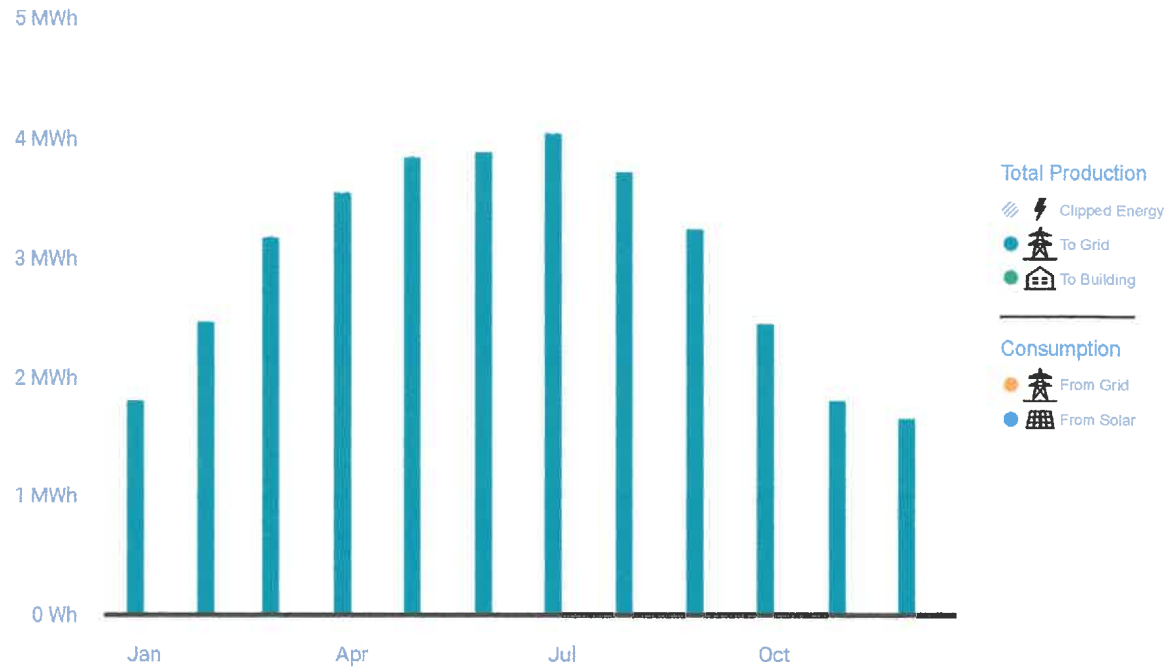
ESTIMATED MONTHLY ENERGY



Total clipped energy: 0.14%

PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
64	ZNShine PV-tech Co. Ltd., ZXM7-SH108-400 Full Black	25.6 kWp			129°	35°
Total: 64		25.6 kWp				

BILL OF MATERIALS (BOM)

Items	Part Number	Quantity	Price ($)	Total ($)
Base Price per W (DC)		25600	2.70	69,120.00

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BILL OF MATERIALS (BOM) (CONTINUED)

Items	Part Number	Quantity	Price ($)	Total ($)
SE10KUS (SE-SIN)		2		
C651U		64		
ZXM7-SH108-400 Full Black		64		

Total Price $ 69,120.00

ELECTRICAL DESIGN

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
2 xSE10KUS (SE-SIN) 12.71 kW	1 x string 127% Oversizing	32 x C651U	32

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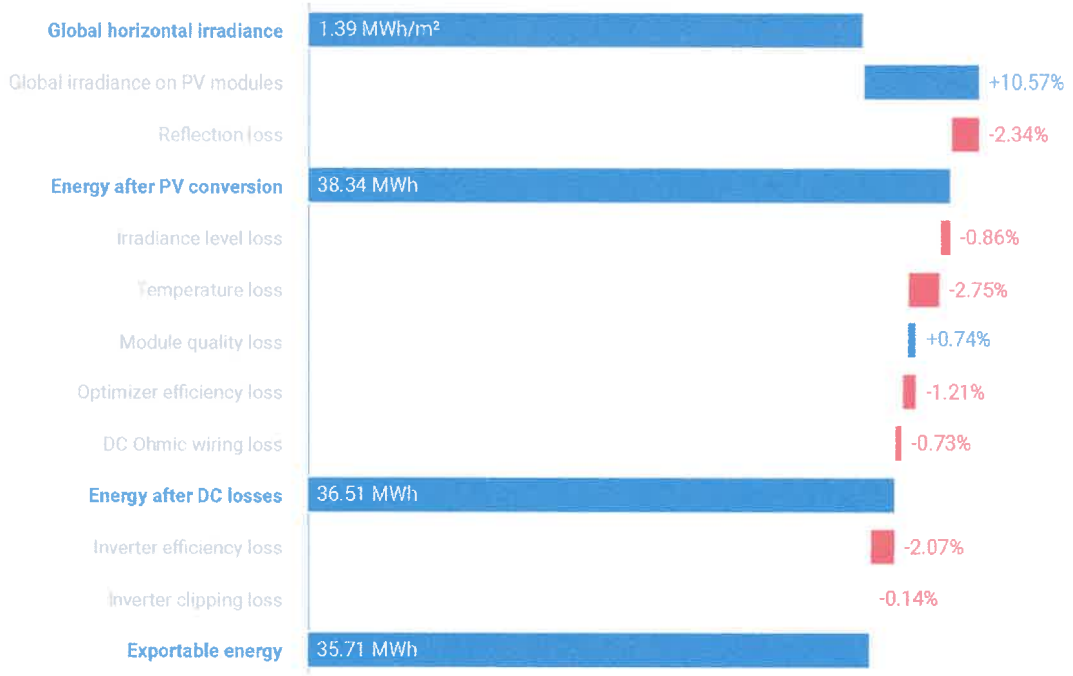
SYSTEM LOSS DIAGRAM



SIMULATION PARAMETERS

LOCATION & GRID

Time zone	EDT (New_York)
Weather station	Pease (AFB)/Portsmout (14 km away)
Station altitude	31 m
Station data source	Meteonorm 8.2
Grid	208V L-L, 120V L-N

LOSS FACTORS

Near shading	Enabled
Albedo	0.20
Bi-Facial Albedo	0.30
Soiling/Snow	0%
Incidence angle modifier (IAM), ASHRAE b0 param.	0.05
Thermal loss factor Uc (const) Flush mount	20
Thermal loss factor Uc (const) Tilted	29
LID loss factor	0%
System unavailability	0%