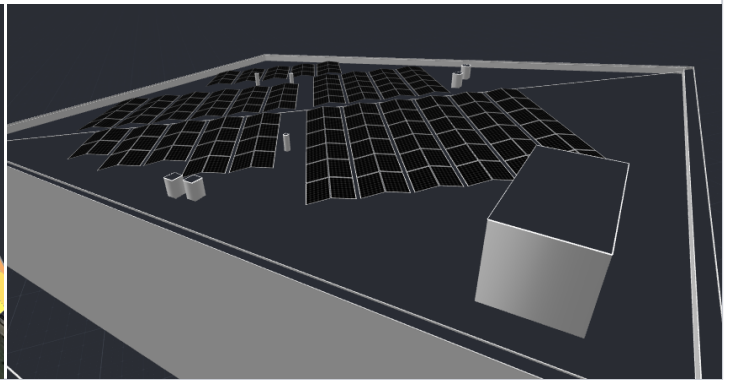
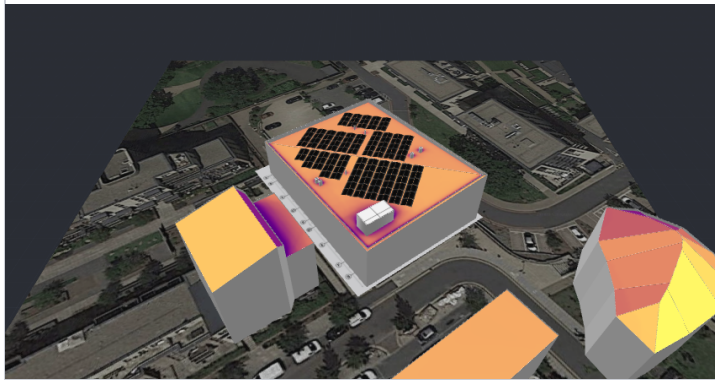
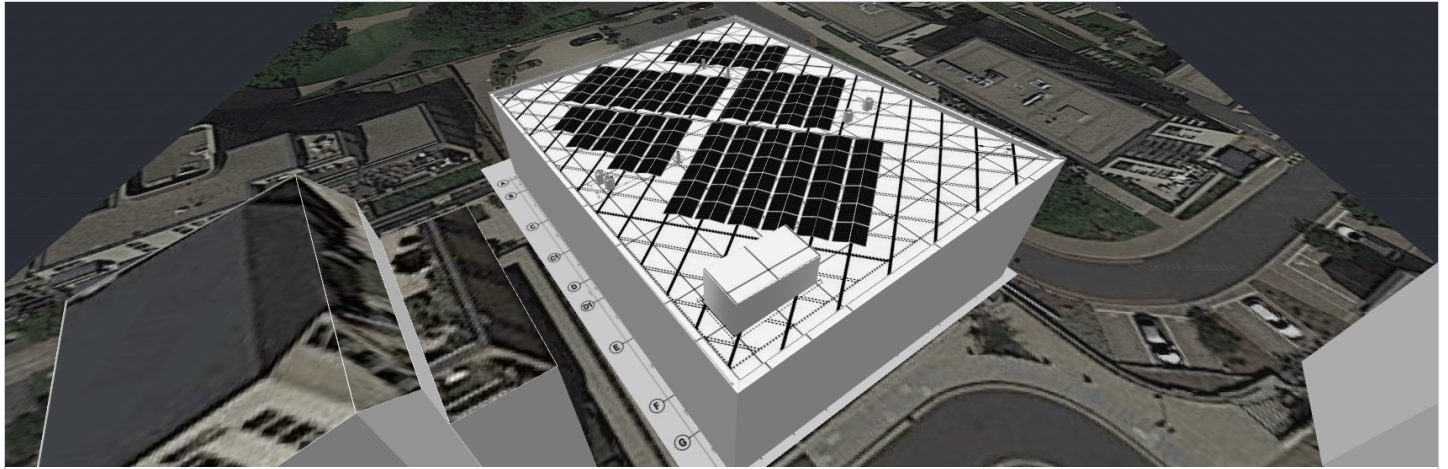


ONE STONEGROVE 22 X REC 370 (82.14 KWP)

Hayling Way 5, Edgware, HA8 8BN, United Kingdom | Martin Narraway | 6 Oct 2021



SYSTEM OVERVIEW

 **222 PV modules**

 **1 Inverters**

 **112 Optimizers**

SIMULATION RESULTS



Installed DC Power

82.14 kW_p



Max Achieved AC Power

66.60 kW



Annual Energy Production

67.61 MWh



CO2 Emission Saved

15.75 t



Equivalent Trees Planted

724



Max Achieved DC Power

71.00 kW



DC/AC Oversizing

107 %



Max Active AC Power

66.60 kW



Performance Ratio

86 %



Performance Index

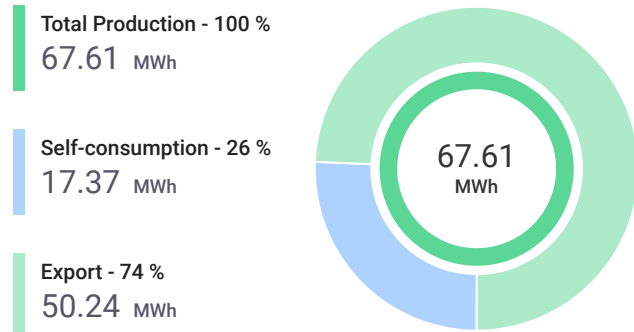
823 kWh/kW_p

ONE STONEGROVE 22 X REC 370 (82.14 KWP)

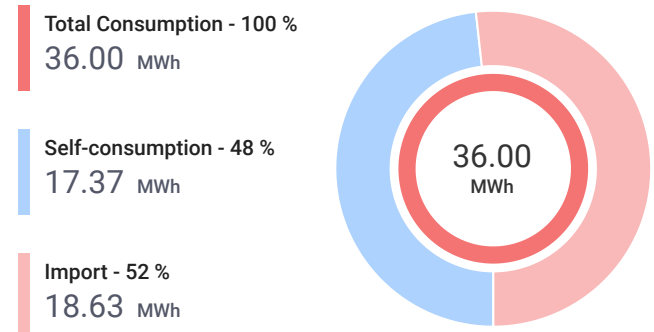
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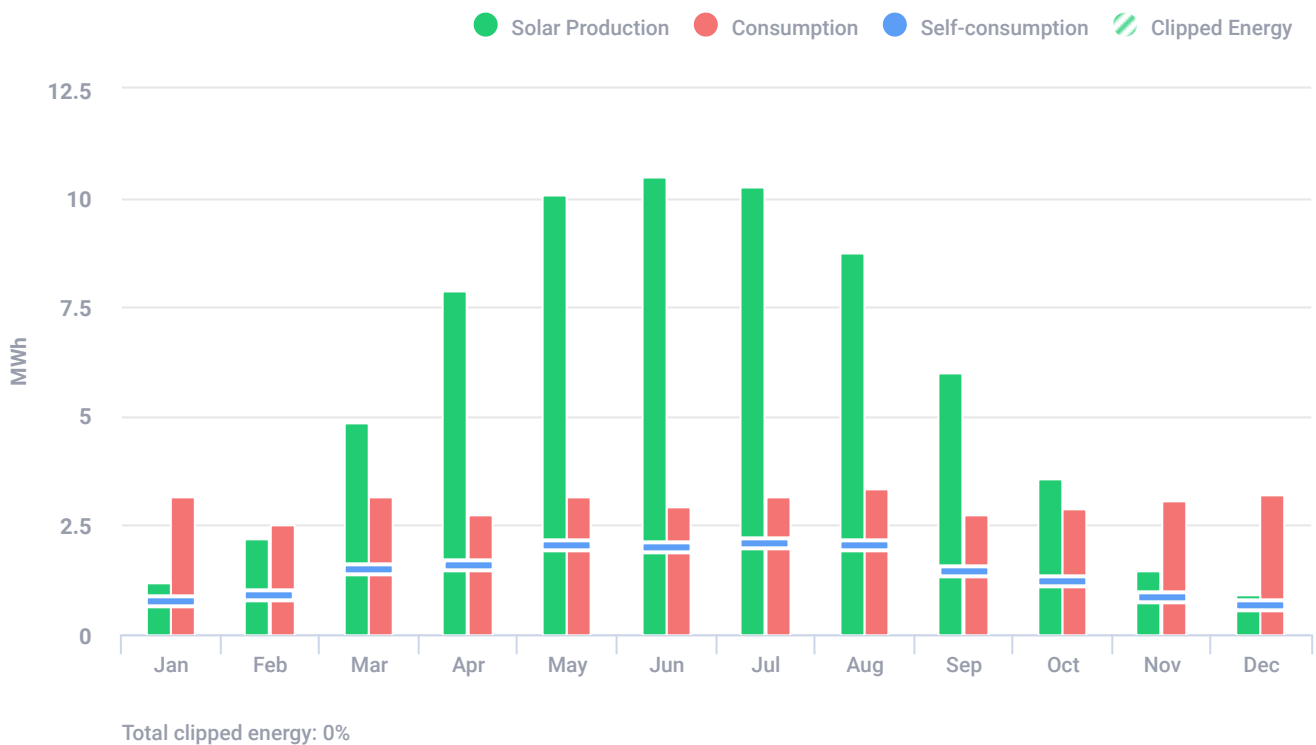
SYSTEM PRODUCTION



CONSUMPTION



ESTIMATED MONTHLY ENERGY



PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
52	REC Solar AS, REC-370TP4 (user-defined)	19.2 kWp			125°	7°
59	REC Solar AS, REC-370TP4 (user-defined)	21.8 kWp			300°	15°
52	REC Solar AS, REC-370TP4 (user-defined)	19.2 kWp			280°	15°

ONE STONEGROVE 22 X REC 370 (82.14 KWP)

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PV MODULES (CONTINUED)

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
59	REC Solar AS, REC-370TP4 (user-defined)	21.8 kWp			82°	7°
Total:	222	82.1 kWp				

BILL OF MATERIALS (BOM)

Items	Quantity
SE66.6K Manager	1
P701	112
REC-370TP4	222

ELECTRICAL DESIGN

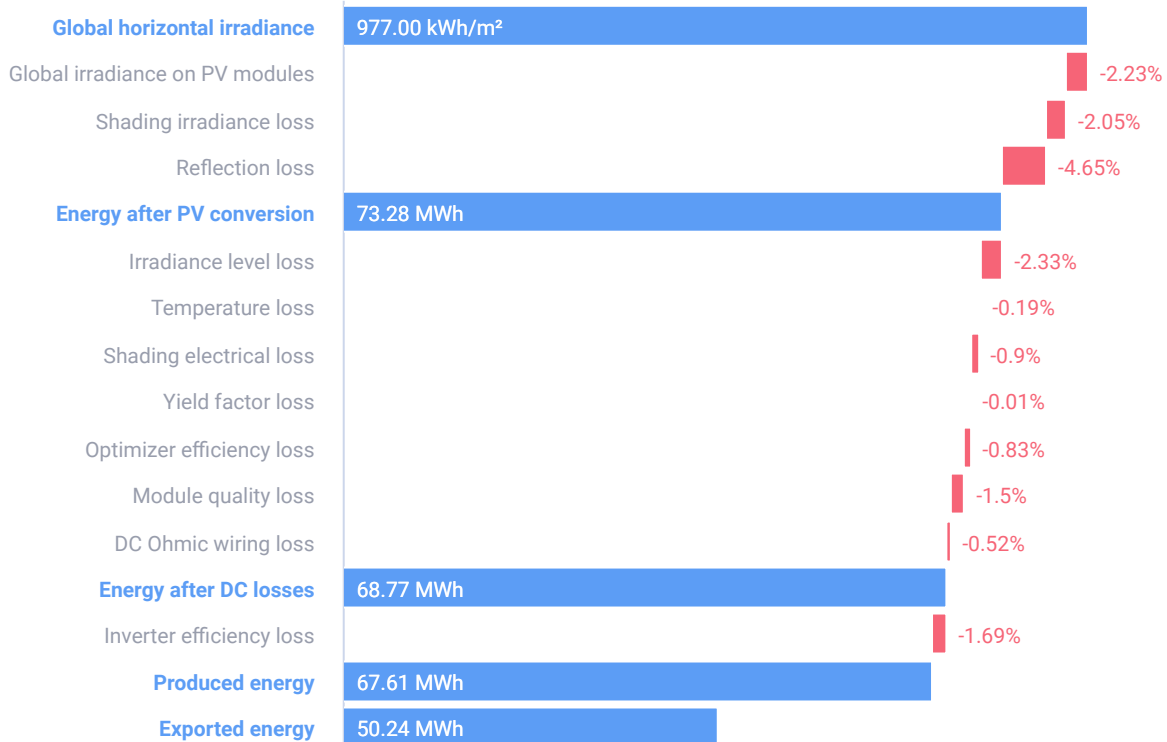
Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
1 x SE66.6K Manager 71kW 107%	Center		
	Ω 1 x string	20 x P701 (2:1)	40
	Ω 1 x string	18 x P701 (2:1)	36
	Ω 1 x string	17 x P701 (2:1), 1 x P701 (1:1)	35
	Left		
	Ω 1 x string	20 x P701 (2:1)	40
Ω 1 x string	18 x P701 (2:1)	36	
Ω 1 x string	17 x P701 (2:1), 1 x P701 (1:1)	35	

ONE STONEGROVE 22 X REC 370 (82.14 KWP)

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SYSTEM LOSS DIAGRAM



SIMULATION PARAMETERS



LOCATION & GRID

Time zone	BST (London)
Weather station	Watford (10.24 km away)
Station altitude	72 m
Station data source	Meteonorm 7.1
Grid	400V L-L, 230V L-N



LOSS FACTORS

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