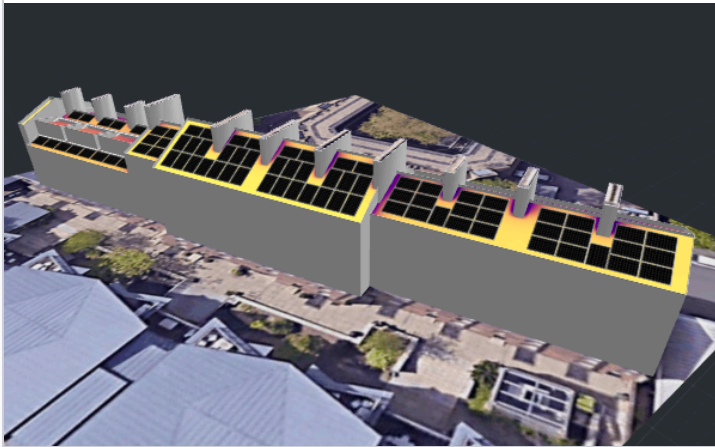
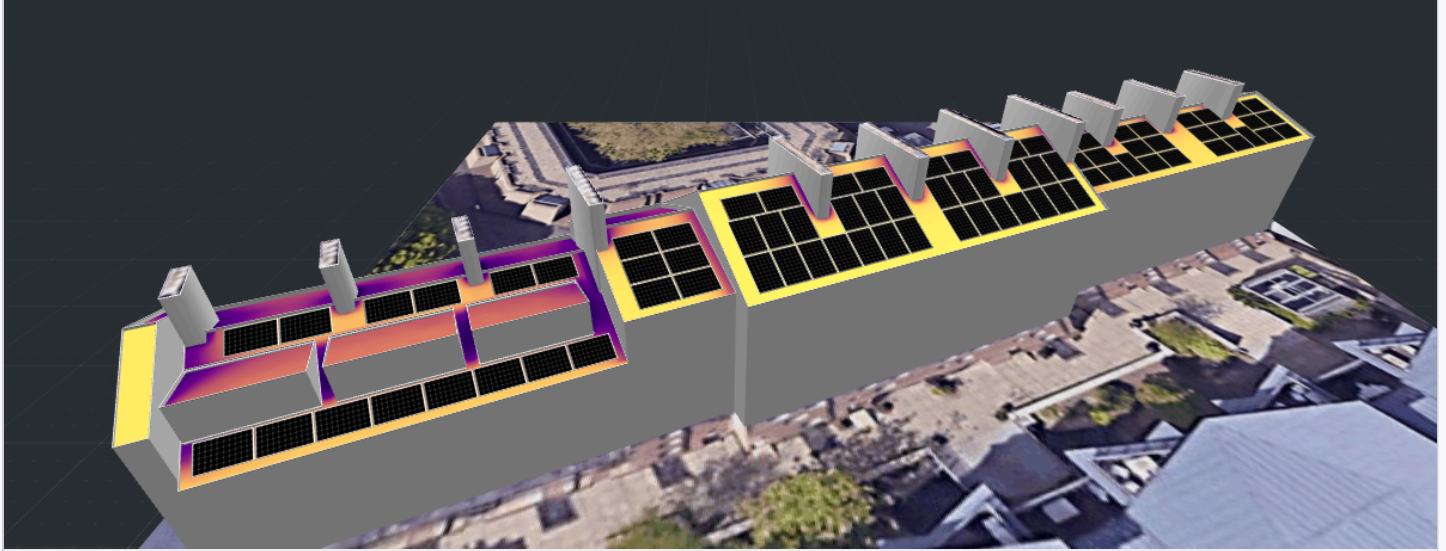


## MUSEUM ROAD PV - FINAL

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### SYSTEM OVERVIEW

 80 PV modules

 1 Inverter

 80 Optimizers

### SIMULATION RESULTS



Installed DC Power

37.20 kWp



Max Achieved AC Power

33.30 kW



Annual Energy Production

34.07 MWh



CO2 Emission Saved (Annually)

6.59 t



Equivalent Trees Planted (Annually)

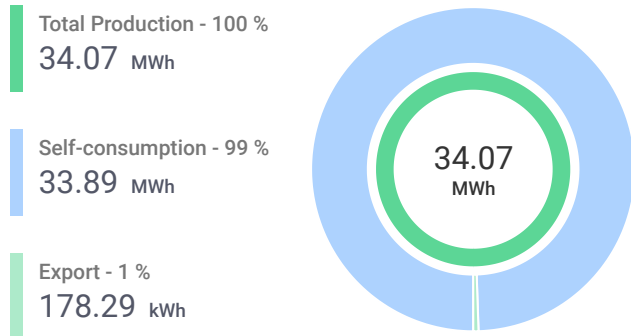
303

**MUSEUM ROAD PV - FINAL**

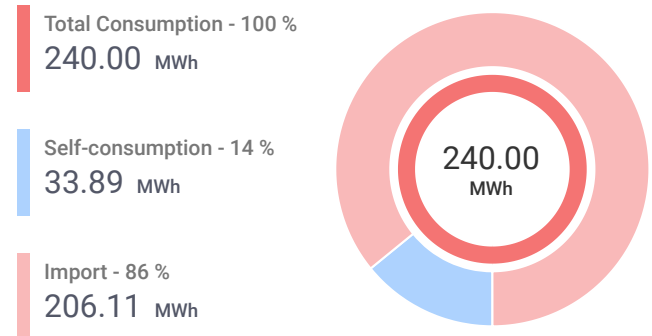
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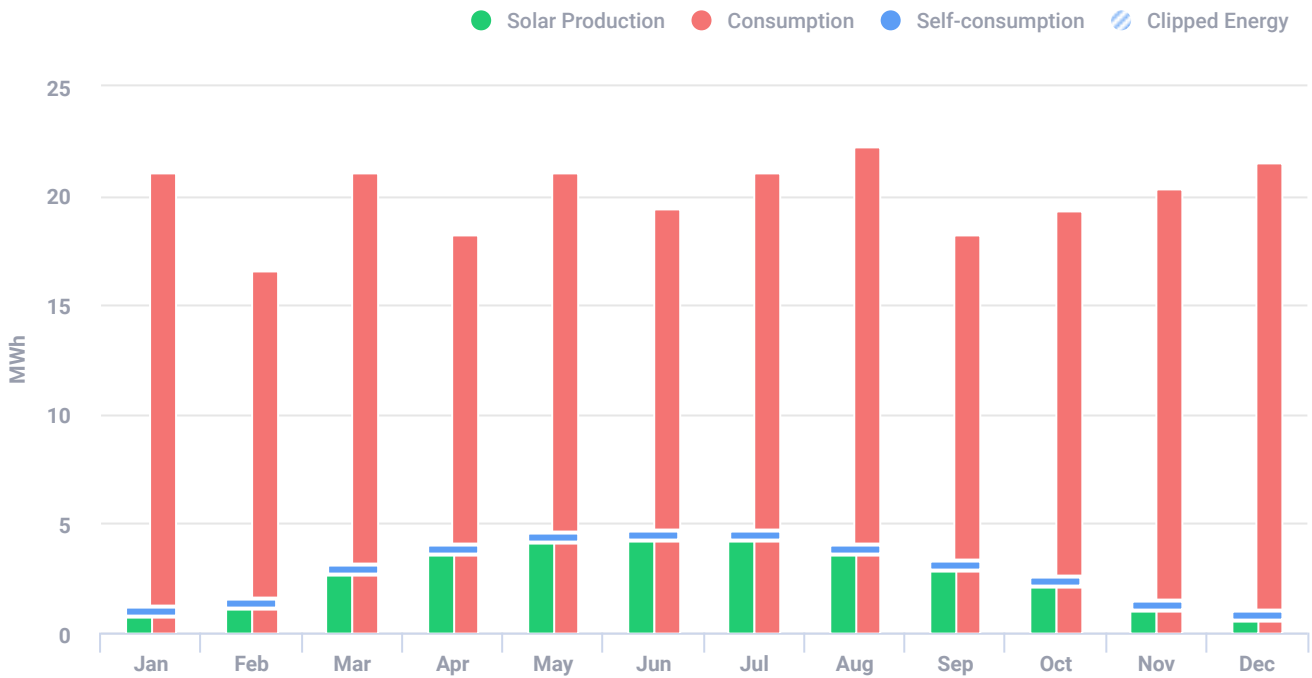
**SYSTEM PRODUCTION**



**CONSUMPTION**



**ESTIMATED MONTHLY ENERGY**



Total clipped energy: 0.03%

**PV MODULES**









# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
8	REC Solar AS, REC420AA Pure-R (user-defined)	3.4 kWp			156°	30°
2	REC Solar AS, REC 470 Alpha Pure-RX (user-defined)	0.9 kWp			156°	22°

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### PV MODULES (CONTINUED)

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
24	REC Solar AS, REC 470 Alpha Pure-RX (user-defined)	11.3 kWp			156°	22°
26	REC Solar AS, REC 470 Alpha Pure-RX (user-defined)	12.2 kWp			156°	30°
14	REC Solar AS, REC 470 Alpha Pure-RX (user-defined)	6.6 kWp			156°	22°
6	REC Solar AS, REC 470 Alpha Pure-RX (user-defined)	2.8 kWp			156°	22°
<b>Total:</b>	<b>80</b>	<b>37.2 kWp</b>				

### ELECTRICAL DESIGN

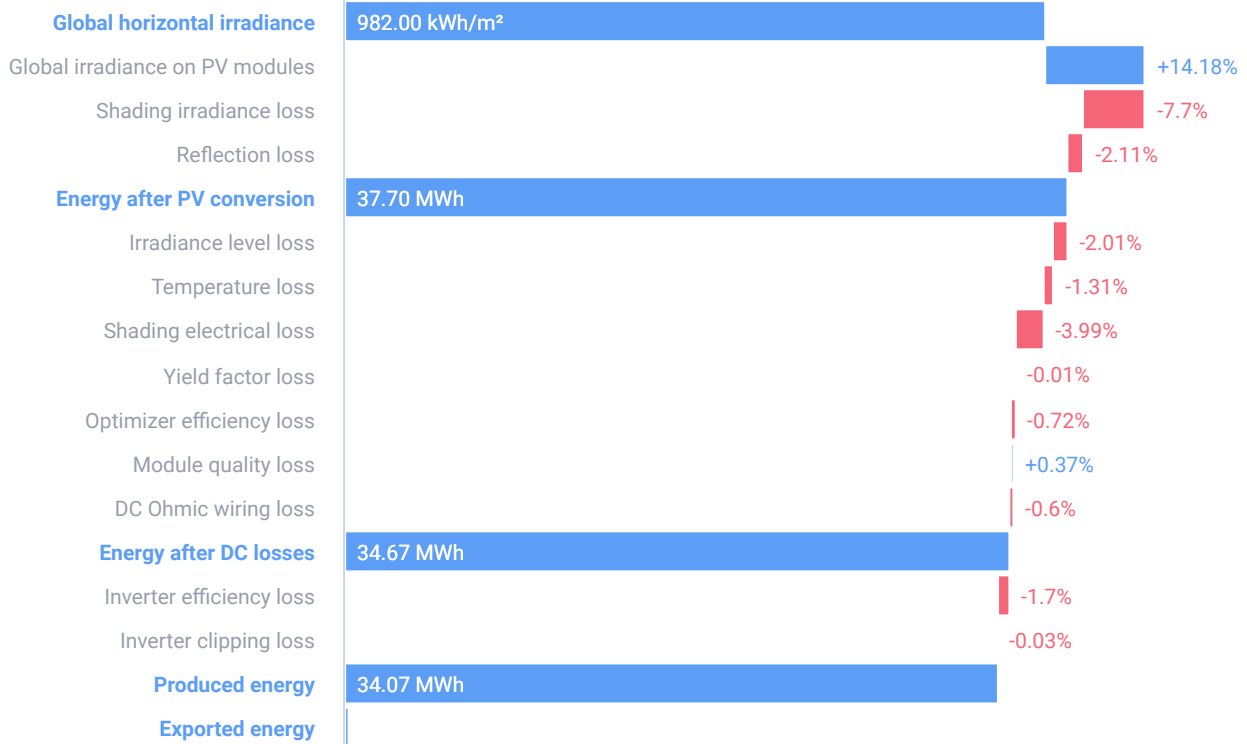
Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
 1 x SE33.3K 36.82kW   111% Oversizing	 4 x strings	 20 x S500B	 20

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**SYSTEM LOSS DIAGRAM**



**SIMULATION PARAMETERS**



**LOCATION & GRID**

Time zone	BST (London)
Weather station	Oxford (1.12 km away)
Station altitude	57 m
Station data source	Meteonorm 7.1
Grid	400V L-L, 230V 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 U <sub>c</sub> (const) Flush mount	20
Thermal loss factor U <sub>c</sub> (const) Tilted	29
LID loss factor	0%
System unavailability	0%