

66 NEW BRIGHTON ROAD EXTENSION

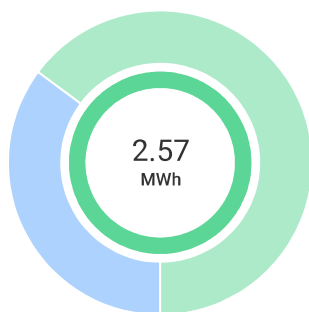
New Brighton Road 66, Emsworth, PO10 7QR, United Kingdom | Craig Leather | 28 Jul 2023

**SYSTEM OVERVIEW** **10** PV modules **1** Inverter **10** Optimizers**SIMULATION RESULTS**
Installed DC Power
2.50 kWp
Max Achieved AC Power
2.20 kW
Annual Energy Production
2.57 MWh
CO2 Emission Saved
497.94 kg
Equivalent Trees Planted
23**SYSTEM PRODUCTION**

Total Production - 100 %
2.57 MWh

Self-consumption - 35 %
906.27 kWh

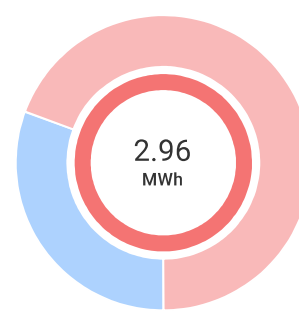
Export - 65 %
1.67 MWh

**CONSUMPTION**

Total Consumption - 100 %
2.96 MWh

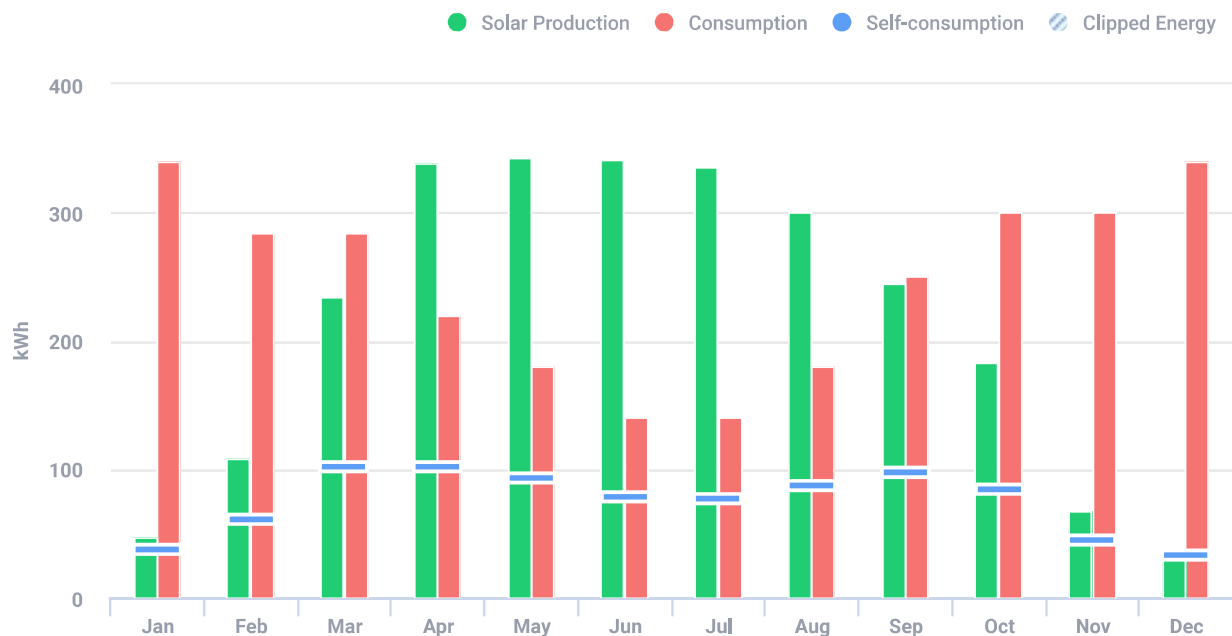
Self-consumption - 31 %
906.27 kWh

Import - 69 %
2.05 MWh



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**ESTIMATED MONTHLY ENERGY**

Total clipped energy: 0.03%

PV MODULES

# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
10	JA Solar, JAM6 (BK)-60-250/SI	2.5 kWp			195°	35°
Total:	10	2.5 kWp				

BILL OF MATERIALS (BOM)

Items	Part Number	Quantity	Price (£)	Total (£)
SE2200H 2.2kW "Home Wave" Single Phase Inverter	SE2200H-RW000BEN4	1	0.00	0.00
S440 input up to 440Wp, Max Isc 14.5A	S440-1GM4MRM	10	0.00	0.00
JAM6 (BK)-60-250/SI		10		

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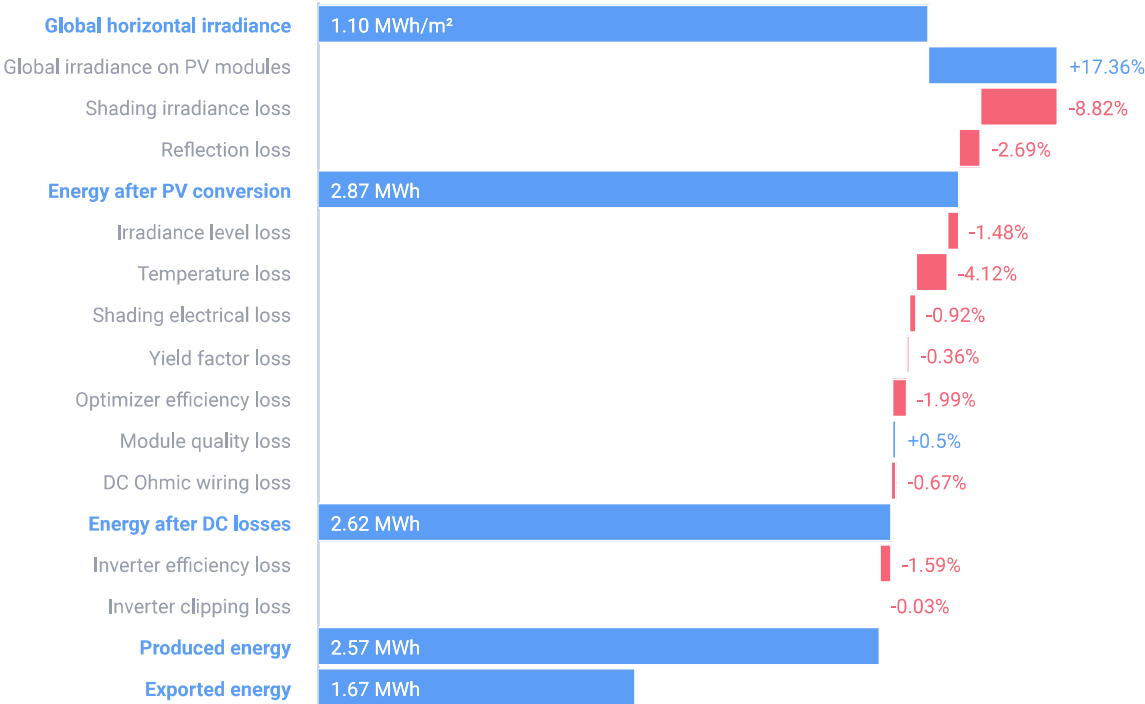
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ELECTRICAL DESIGN

Inverters & Storage	Strings per inverter	Optimizers per string	PV modules per string
 1 x SE2200H 2.49kW 113% Oversizing	 1 x string	 10 x S440	 10

SYSTEM LOSS DIAGRAM



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SIMULATION PARAMETERS



LOCATION & GRID

Time zone	BST (London)
Weather station	Fontwell (23.91 km away)
Station altitude	1 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 Uc (const) Flush mount	20
Thermal loss factor Uc (const) Tilted	29
LID loss factor	0%
System unavailability	0%