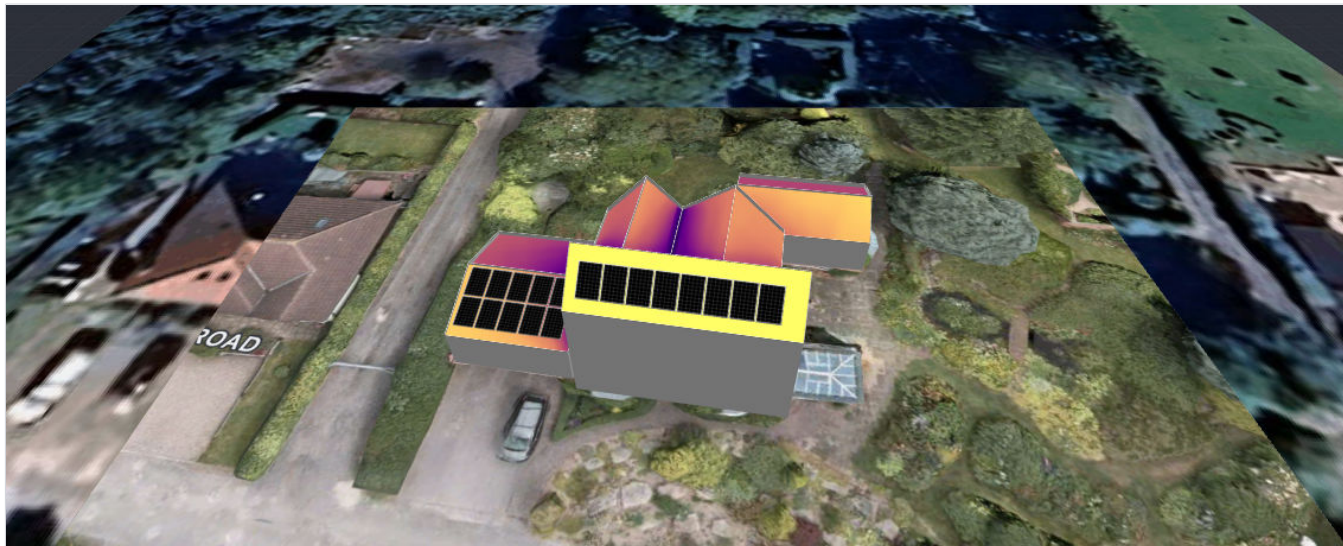


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SMART BATTERY

SolarEdge Home Battery 9.7kWh x 2

Smart Battery Management

Self Consumption Battery + PV

81%

Bill Savings on Battery Lifetime

£ 4,846

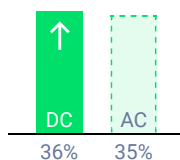


Total Storage Capacity

19.4 kWh

Total Battery Power

10 kW

ADVANTAGES
OF DC COUPLED
STORAGE OVER
AC Battery Self
Consumption3%
better than AC

SYSTEM OVERVIEW



18 PV modules



1 Inverter



18 Optimizers



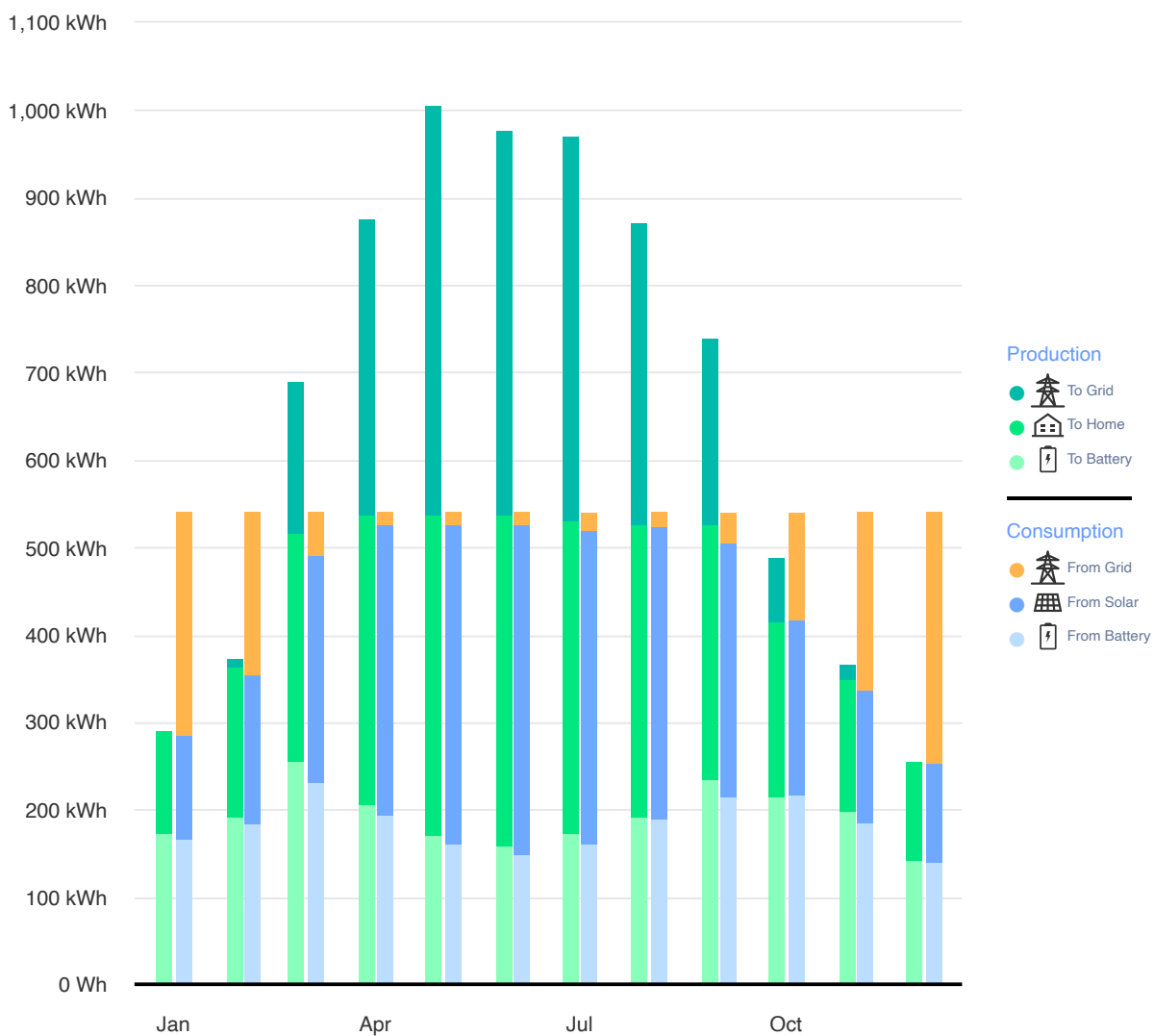
2 Batteries

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ESTIMATED MONTHLY ENERGY




Total Clipped Energy PV only: 0%





Production To Battery To Home Consumption From Battery From PV From Grid

Month	(kWh)	(kWh)	(kWh)	To Grid (kWh)	(kWh)	(kWh)	(kWh)	(kWh)
Jan	285	175	118	-	541	167	118	256
Feb	367	192	171	12	541	185	171	185
Mar	664	257	260	173	541	231	260	50
Apr	865	206	332	338	541	195	332	14
May	995	172	366	468	542	162	366	15
Jun	968	159	378	441	542	150	378	15
Jul	960	173	358	440	542	162	358	22
Aug	872	191	335	346	542	191	335	16
Sep	720	235	293	213	542	214	293	34
Oct	493	215	200	75	542	218	200	124
Nov	356	198	151	18	542	187	151	204
Dec	253	143	112	-	542	141	112	289

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PV MODULES						
# Module	Model	Peak power	Racking type	Orientation	Azimuth	Tilt
8	Shanghai AIKO Energy Co., Ltd., AIKO-A465-MAH54Mw	3.7 kWp			189°	45°
10	Shanghai AIKO Energy Co., Ltd., AIKO-A465-MAH54Mw	4.7 kWp			190°	18°
Total:	18	8.4 kWp				

ESTIMATED BILL SAVINGS YEAR 1

Avg. Monthly

Current Monthly Bill	Monthly Bill with SolarEdge	Net Bill Monthly Savings	Bill Offset
£ 151.67	£ -2.99	£ 154.65	101.97 %
		£21.81 Savings from Battery	14.38% Savings from Battery

Estimated Net Lifetime Bill Savings

£ 33,911

£4,846 Savings from Battery

Utility Provider: UK provider

Utility Rate: Octopus (0.28 £/kWh)

Export Rate: 15p export (0.15 £/kWh)

SUNNYBANK

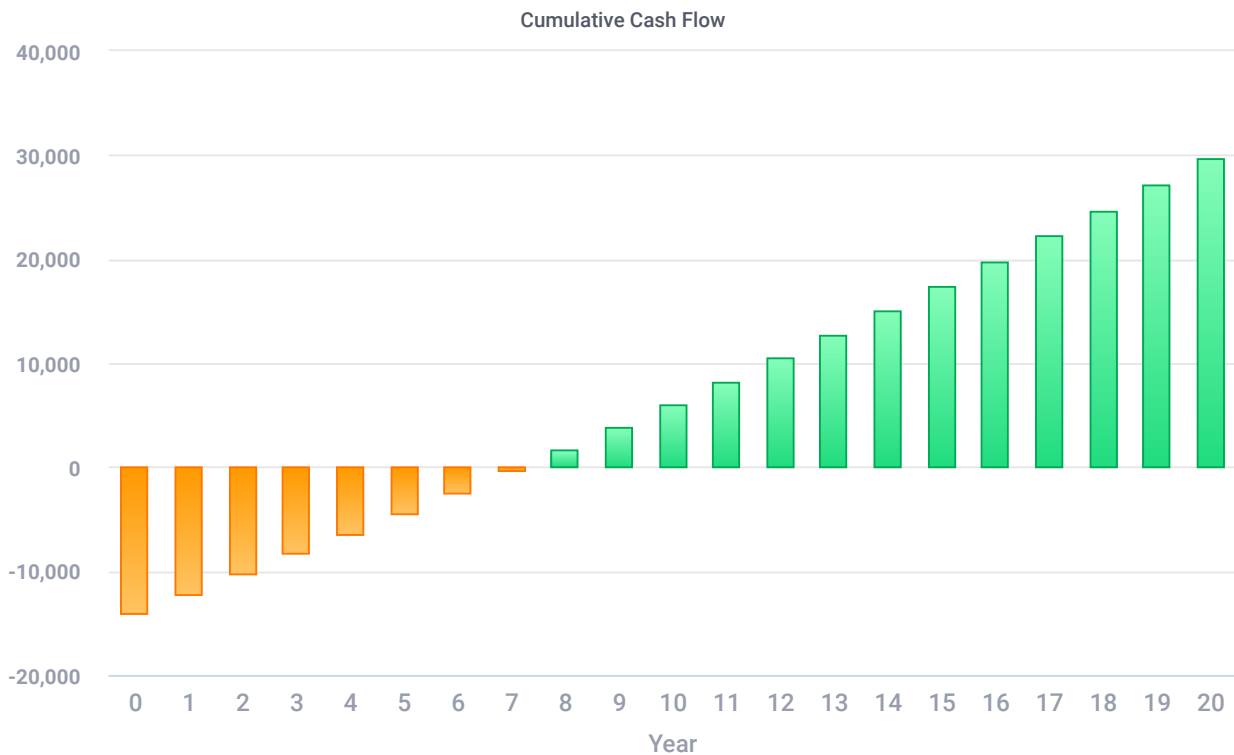
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DETAILED FINANCIAL ANALYSIS

System Price	Maintenance Cost (NPV)	Returns from Incentives (NPV)	Net Payments	Lifetime Bill Savings (NPV)
£ 14,000	£ N/A	£ N/A	£ 14,000	£ 33,911

System Profit (NPV)	Internal Return Rate (IRR)	Return Of Investment (ROI)	Levelized Cost Of Energy (LCOE)	Payback Period
£ 19,911	13.47 %	142.22 %	£/kWh 0.121	7.2 years



YEARLY CASH FLOW

# Year	System Price	Net Bill Savings	Annual Cash Flow	Cumulative Cash Flow
0	£ -14,000.00	£ 0.00	£ -14,000.00	£ -14,000.00
1		£ 1,855.86	£ 1,855.86	£ -12,144.14

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**YEARLY CASH FLOW (CONTINUED)**

# Year	System Price	Net Bill Savings	Annual Cash Flow	Cumulative Cash Flow
2		£ 1,887.30	£ 1,887.30	£ -10,256.85
3		£ 1,919.24	£ 1,919.24	£ -8,337.60
4		£ 1,951.89	£ 1,951.89	£ -6,385.72
5		£ 1,984.88	£ 1,984.88	£ -4,400.83
6		£ 2,018.61	£ 2,018.61	£ -2,382.22
7		£ 2,052.95	£ 2,052.95	£ -329.27
8		£ 2,087.82	£ 2,087.82	£ 1,758.55
9		£ 2,123.33	£ 2,123.33	£ 3,881.88
10		£ 2,159.41	£ 2,159.41	£ 6,041.29
11		£ 2,195.93	£ 2,195.93	£ 8,237.22
12		£ 2,233.08	£ 2,233.08	£ 10,470.30
13		£ 2,271.11	£ 2,271.11	£ 12,741.41
14		£ 2,309.56	£ 2,309.56	£ 15,050.97
15		£ 2,348.84	£ 2,348.84	£ 17,399.80
16		£ 2,388.75	£ 2,388.75	£ 19,788.55
17		£ 2,429.32	£ 2,429.32	£ 22,217.87
18		£ 2,470.60	£ 2,470.60	£ 24,688.47
19		£ 2,512.59	£ 2,512.59	£ 27,201.06
20		£ 2,555.31	£ 2,555.31	£ 29,756.37
Total:		£ 43,756.37	£ 29,756.37	

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SIMULATION PARAMETERS



LOCATION & GRID

Time zone	BST (London)
Weather station	Nottingham Wxctr (12 km away)
Station altitude	117 m
Station data source	Meteonorm 8.2
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 _c (const) Flush mount	20
Thermal loss factor U _c (const) Tilted	29
LID loss factor	0%
System unavailability	0%