	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Solar Array Size	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
Projected Sun Hours/day	1.1	1.9	3.1	4.6	5.6	5	4.8	4.4	3.7	2.7	1.5	1
Watts Generated / Day	4,554	7,866	12,834	19,044	23,184	20,700	19,872	18,216	15,318	11,178	6,210	4,140
kWh/Day	5	8	13	19	23	21	20	18	15	11	6	4
Generated kWh/Month	137	236	385	571	696	621	596	546	460	335	186	124
~ Usage kWh/Month, grid price	1,500	1,300	1,200	1,100	800	800	700	800	1,000	1,200	1,300	1,400
~ Usage £/Month, grid price	£450	£390	£360	£330	£240	£240	£210	£240	£300	£360	£390	£420
~ £ Saved per Month	£41	£71	£116	£171	£209	£186	£179	£164	£138	£101	£56	£37

Estimated annual usage 13,100 kW
Estimated Generated power 4,893 kW

Annual Cost, if 100% Grid £3,930
Amount saved per year £1,468 Assuming we use 100% of the power generated.

System Cost £16,000
Years Payback 10.9 Assumes no inflation increases to the cost of electricity, clearly not true.

ASSUMPTIONS:

Figures based on an efficiency of 92% Based on roof facing 5º off south and has an angle of ~35º and not shaded
Typical/old price per kWh as £0.30
Ignored standing charge as have to pay that anyway regardless
Average sun hours based on Met Office figures for Ceredigion for 1991 - 2020
Electricity usage based on old bills