

Battery + night charge off peak tariff

Workspace

Site location

UK (Glos) (51.86, -2.25) · UTC

Battery

generic5 (5 kWh)

Inverter

Generic 5 (5 kW)

setpoints: Night charge winter (7 periods)

Solar Arrays

solar (Generic 445W, 8 panels, 3.6 kW)





Load profile

house load (3,500 kWh/yr)

Tariff

economy 7
import: 0.15, 0.30 · export: 0.12
· daily standing: 0.60

Summary

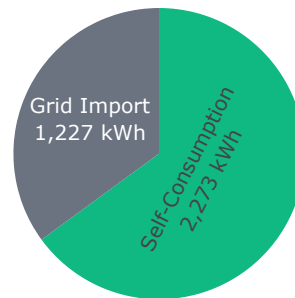
 Solar Generated	3,977 kWh	(3,977 (utilised) + 0 (clipped))
 Load Consumed	3,500 kWh	980 GBP (cost without solar)
 Grid Import	1,227 kWh	212 GBP
 Grid Export	1,634 kWh	196 GBP
\$ Total benefit from solar & battery	964 GBP	
\$ New electricity bill	235 GBP (212 (import) - 196 (export) + 219 (standing))	

Self-Consumption

Share of load met from PV and batteries vs grid import.

64.9%

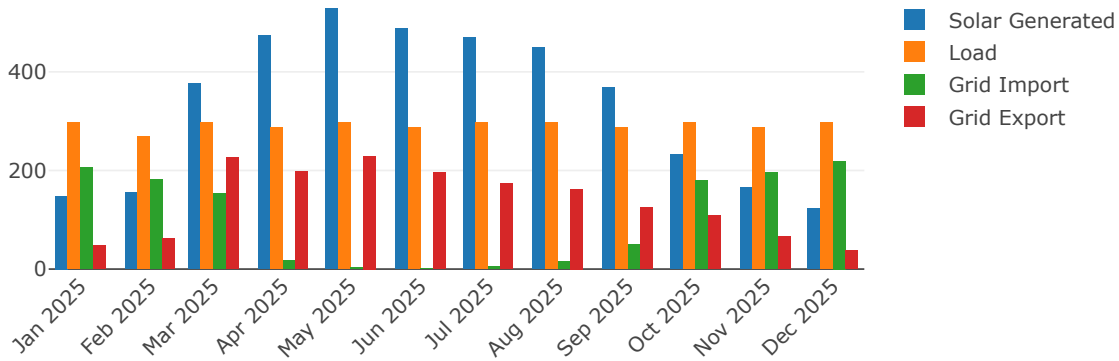
Spring: 80.1% Summer: 97.5%
Autumn: 51.4% Winter: 29.8%



Yearly Summary

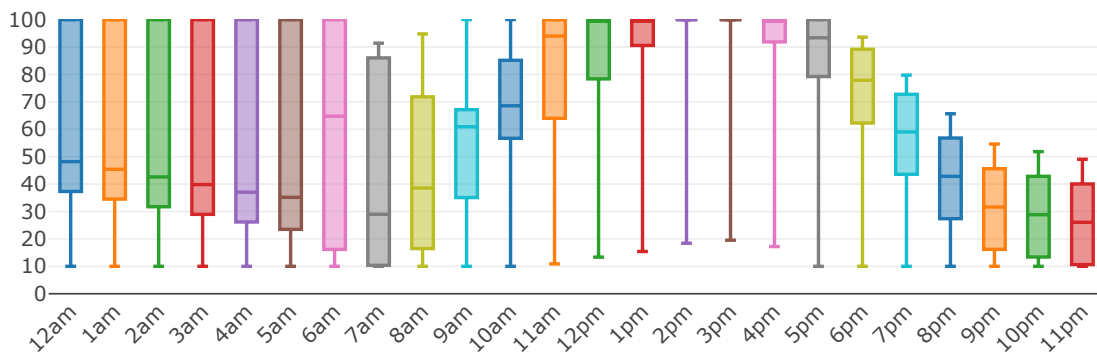
Monthly Energy Totals

Energy flows by month: solar, load, grid import, grid export.



SOC Distribution by Hour

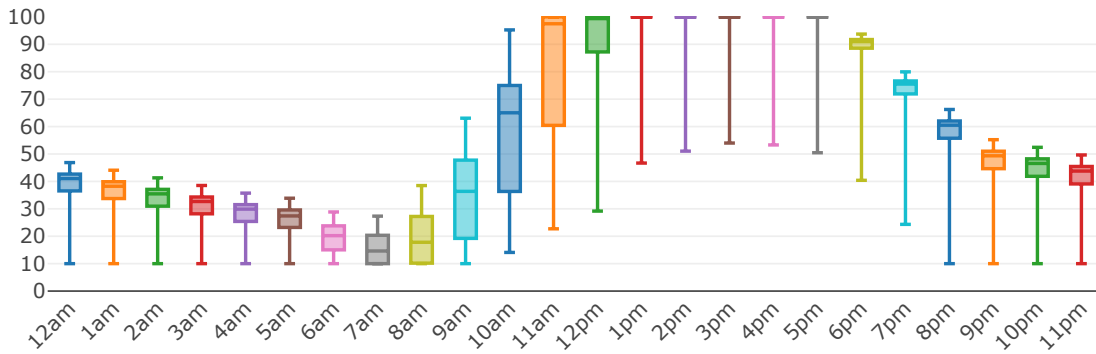
Spread of battery charge levels by hour (box plot).



Summer Monthly Summary

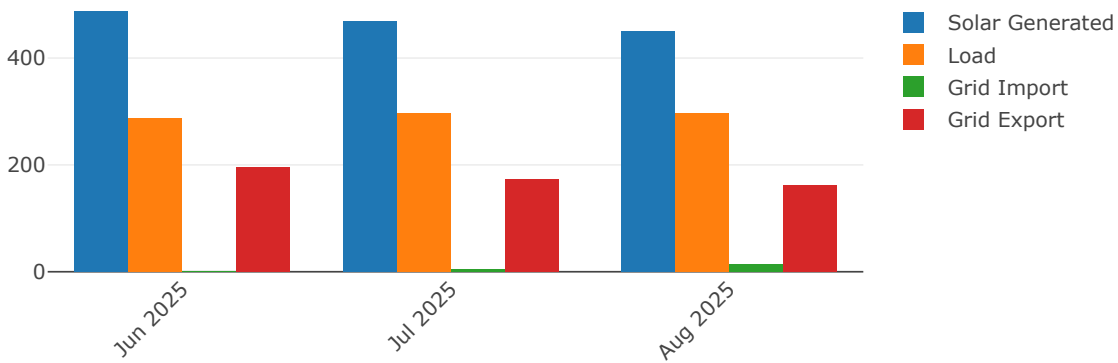
Summer SOC Distribution by Hour

Spread of battery charge levels by hour for June, July, August.



Summer Energy Totals by Month

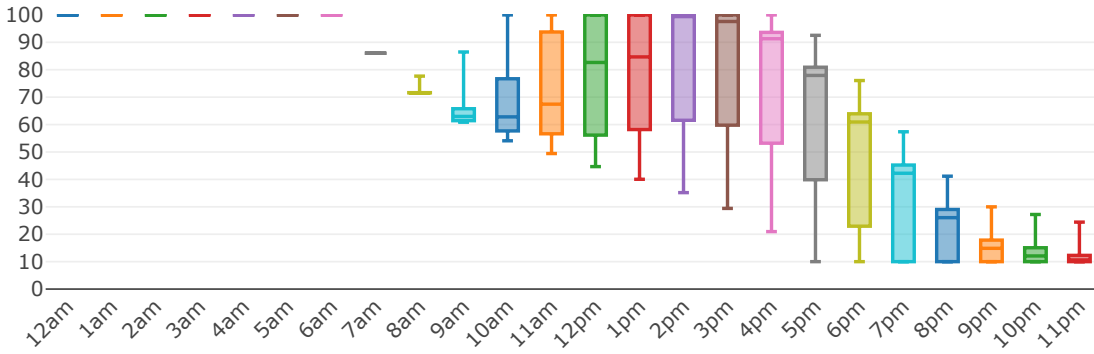
Energy flows for June, July, August: solar, load, grid import, grid export.



Winter Monthly Summary

Winter SOC Distribution by Hour

Spread of battery charge levels by hour for December, January, February.



Winter Energy Totals by Month

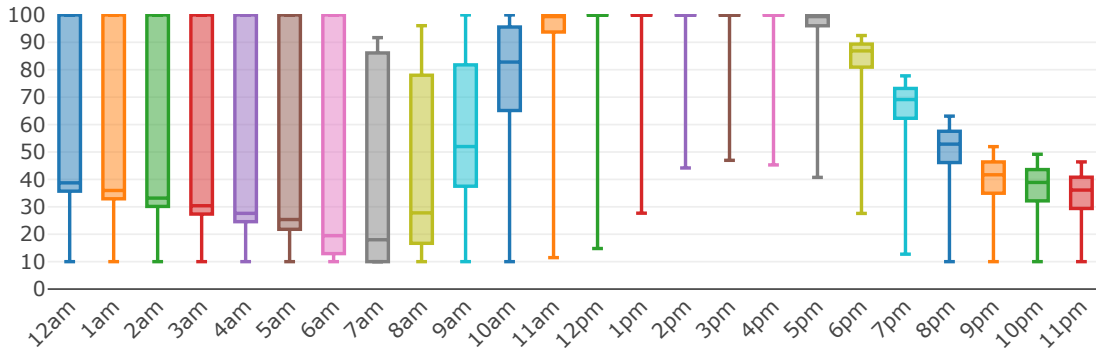
Energy flows for December, January, February: solar, load, grid import, grid export.



Spring Monthly Summary

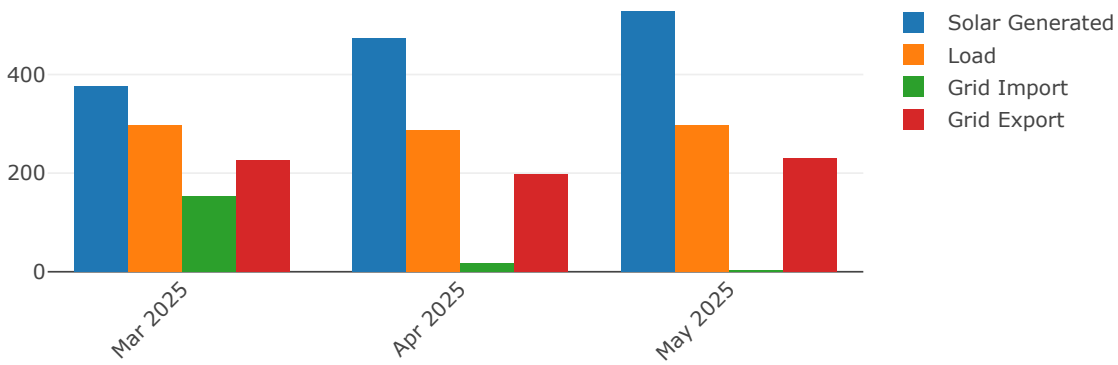
Spring SOC Distribution by Hour

Spread of battery charge levels by hour for March, April, May.



Spring Energy Totals by Month

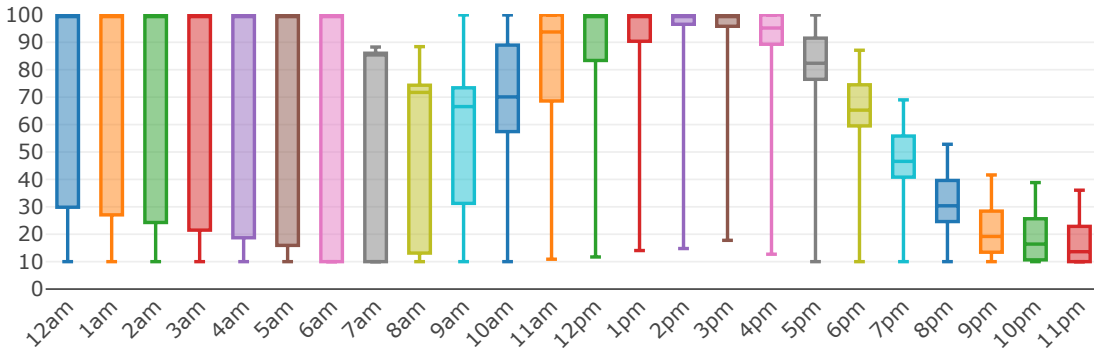
Energy flows for March, April, May: solar, load, grid import, grid export.



Autumn Monthly Summary

Autumn SOC Distribution by Hour

Spread of battery charge levels by hour for September, October, November.



Autumn Energy Totals by Month

Energy flows for September, October, November: solar, load, grid import, grid export.

