

HISTORIC SIMULATION REPORT

EV charge

Workspace

Site location

home (51.89, -2.19) · UTC

Battery

Generic 32kWh (32 kWh)

Inverter

Generic10 (10/10 kW)

setpoints: EV charge (5 periods)

Solar Arrays

Southx18 (Jinko Tiger Neo 54HL4R 445W, 18 panels, 8 kW)

Load profile

house load (3,500 kWh/yr)

Heat pump

Generic Heat pump 12 (space 6,453 kWh · hot water 1,069 kWh)

Tariff

EV tariff
import: 0.09, 0.30 · export: 0.12 · daily standing: 0.60

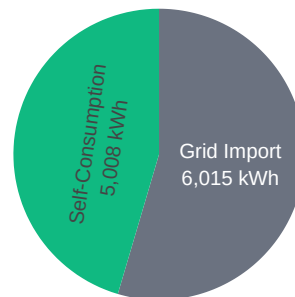
Summary		
☀️ Solar Generated	8,982 kWh	
🏠 Load Consumed	11,022 kWh	2,835 GBP (cost without solar)
🔧 Space heating (heat pump)	6,453 kWh	
🔧 Hot water (heat pump)	1,069 kWh	
🔌 Grid Import	6,015 kWh	640 GBP
🔌 Grid Export	3,757 kWh	451 GBP
\$ Total benefit from solar & battery		2,646 GBP
\$ New electricity bill		408 GBP (640 (import) - 451 (export) + 219 (standing))

Self-Consumption

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

45.4%

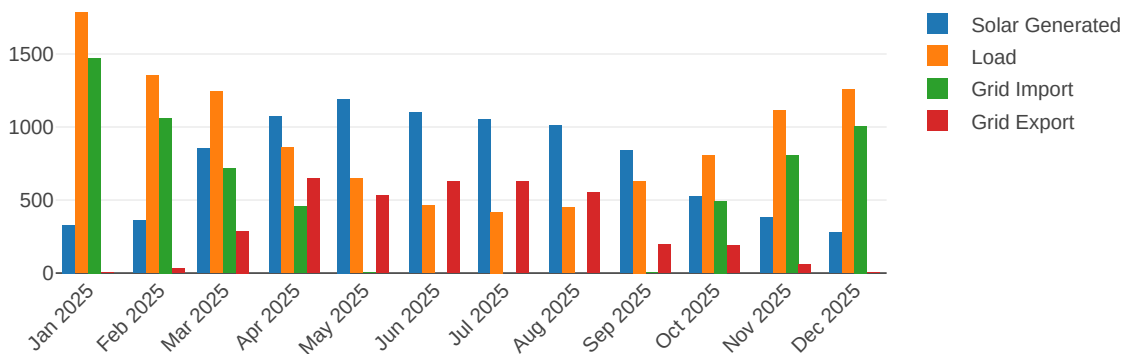
Spring: 57.3% Summer: 100.0%
Autumn: 49.0% Winter: 19.4%



Yearly Summary

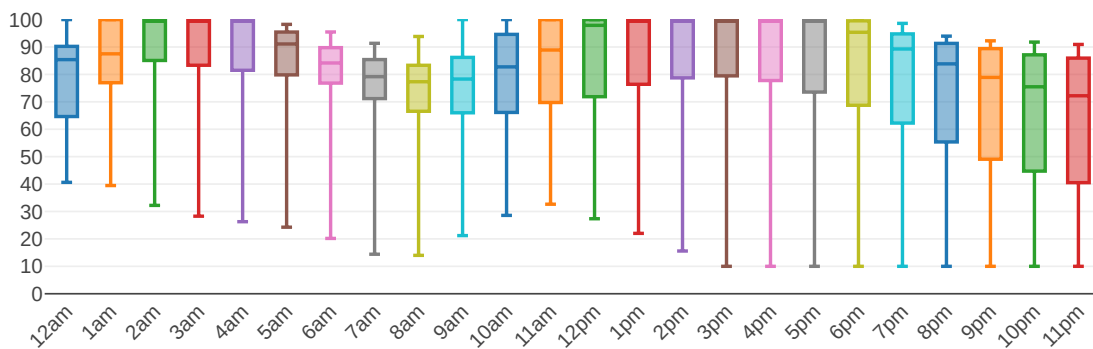
Monthly Energy Totals

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



SOC Distribution by Hour

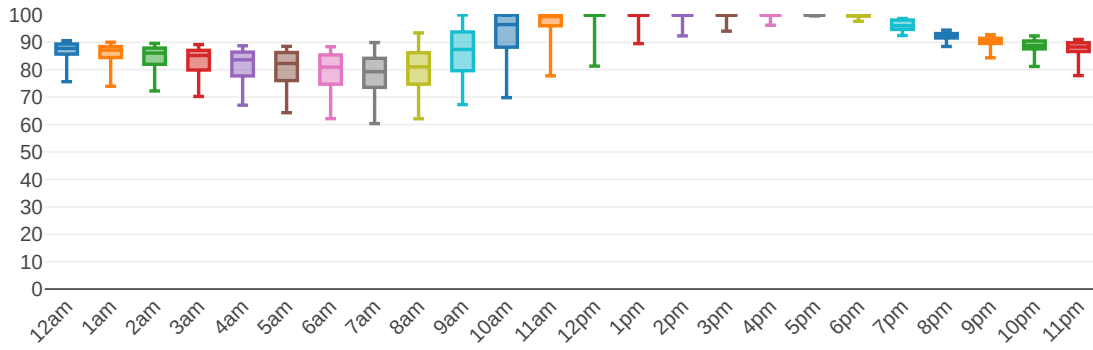
Spread of battery charge levels by hour (box plot).



Summer Monthly Summary

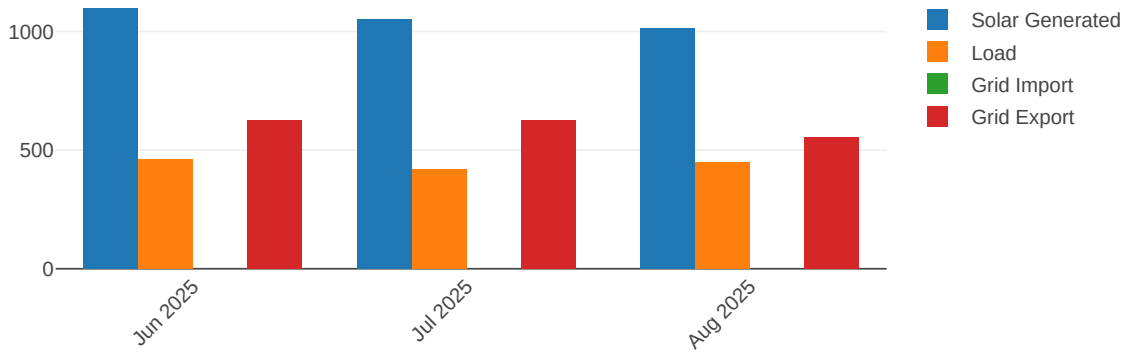
Summer SOC Distribution by Hour

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



Summer Energy Totals by Month

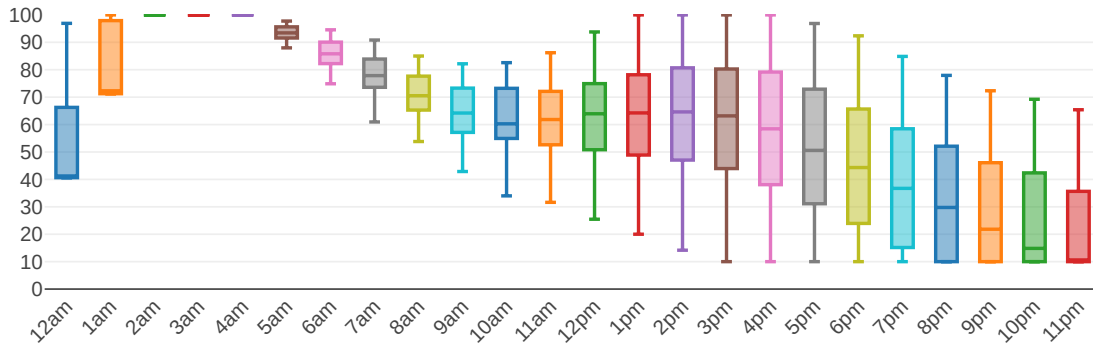
Energy flows for June, July, August: solar, load, grid import, grid export.



Winter Monthly Summary

Winter SOC Distribution by Hour

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



Winter Energy Totals by Month

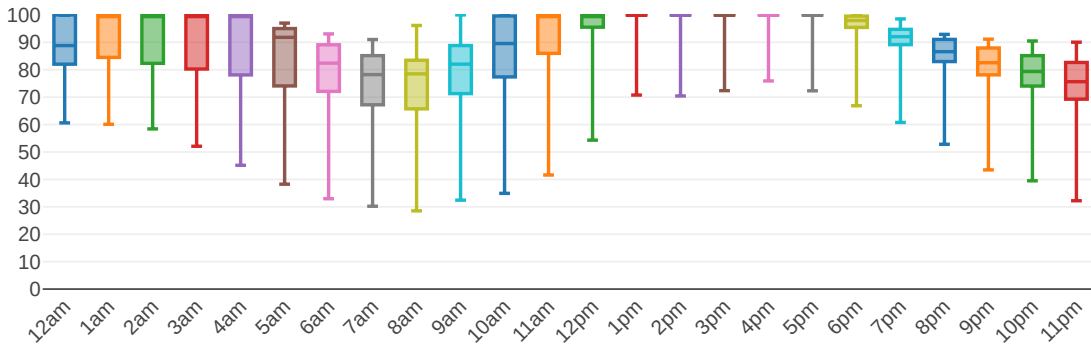
Energy flows for December, January, February: solar, load, grid import, grid export.



Spring Monthly Summary

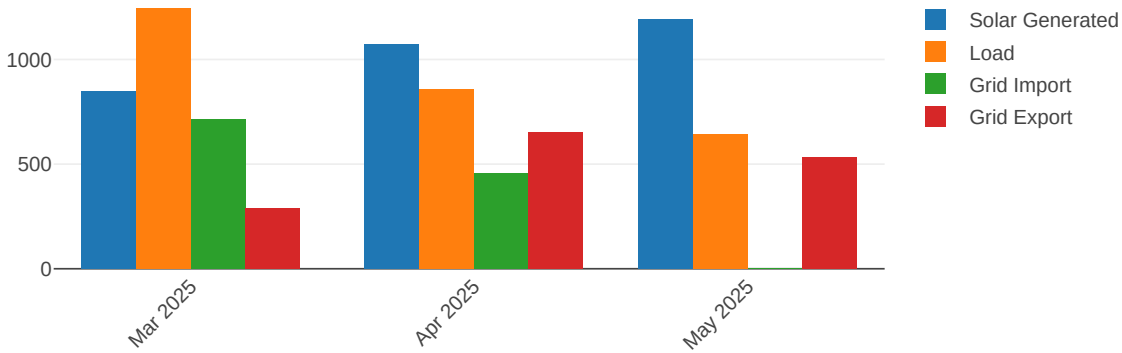
Spring SOC Distribution by Hour

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



Spring Energy Totals by Month

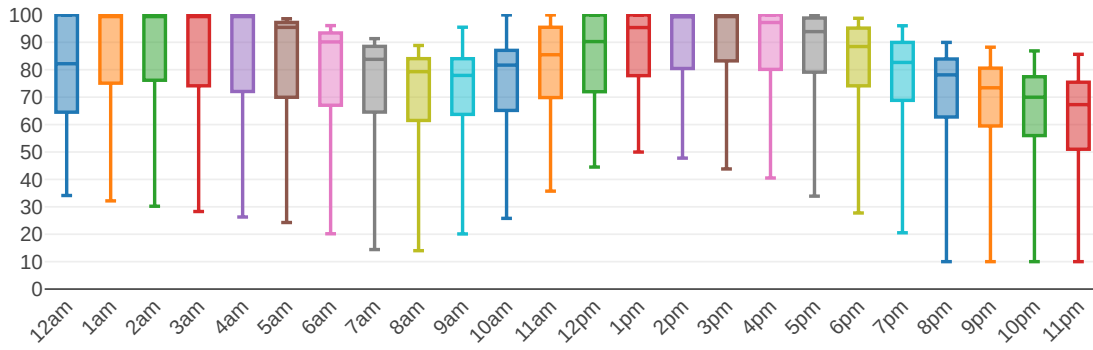
Energy flows for March, April, May: solar, load, grid import, grid export.



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.

