Recommended System Option

10.56 kWp

System Size

Redacted

Redacted

Redacted

Your Solution

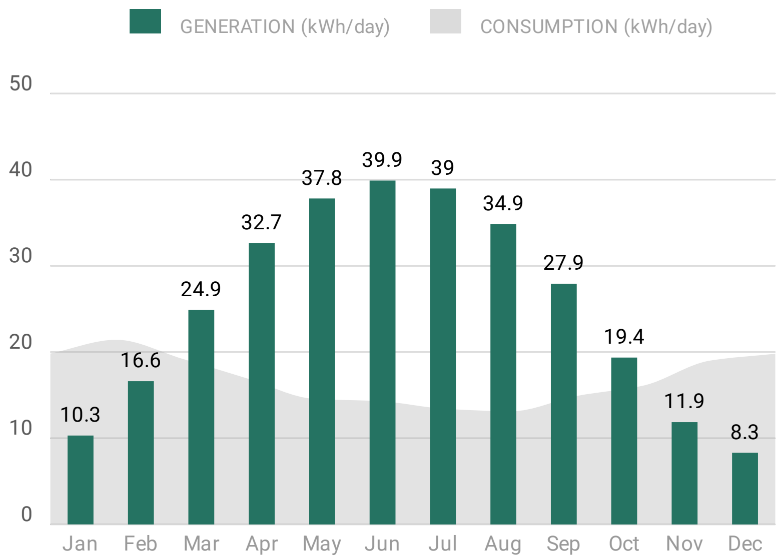
Solar Panels
JA Solar
10.560 kW Total Solar Power
24 x 440 Watt Panels (JAM54D-41-440-LB-TS-AB-MC4)
9,250 kWh per year

Battery
Tesla
13.5 kWh Total Battery Storage
1 x Tesla Powerwall 2.0

S6 String inverter - 1PH DC (2.5-6k)
10kW of Inverter Power
SOLIS - Ningbo Ginlong Technologies
2 x S6-GR1P5K
5 -year Standard Warranty

Warranties: 25 Year Panel Product Warranty, 30 Year Panel Performance Warranty, 5 Year Inverter Product Warranty, 10 Year Battery Product Warranty

System Performance



150%
Energy From Solar

58% Self-consumption	42% Export to grid

System Performance Assumptions: System Total losses: 0%, Inverter losses: 0%, Optimizer losses: 0%, Shading losses: -2300.0%, Performance Adjustment: 0%, Output Calculator: MCS. Panel Orientations: 24 panels with Azimuth 162 and Slope 30.

The performance of solar PV systems is impossible to predict with certainty due to the variability in the amount of solar radiation (sunlight) from location to location and from year to year. This estimate is based upon the standard MCS procedure is given as guidance only. It should not be considered as a guarantee of performance.
The solar PV self-consumption has been calculated in accordance with the most relevant methodology for your system. There are a number of external factors that can have a significant effect on the amount of energy that will be self-consumed.

Shading will be present on your system that will reduce its output to the factor stated. This factor was NOT calculated using the MCS shading methodology, but we can confirm that the system as quoted, taking into account the shading present, will deliver at least 90% of the energy (in kWh) as set out in this performance estimate.

This system performance calculation has been undertaken using estimated values for array orientation, inclination, or shading. Actual performance may be significantly lower or higher if the characteristics of the installed system vary from the estimated values.

Important Note: The energy performance and benefits of EESS is impossible to predict with certainty due to the numerous functions a system can be programmed to perform. This estimate is based upon the standard MCS proceduce and is given as guidance only. It should not be considered as a guarantee of performance.

[EESS capacity not used for self consumption] Storage capacity of the battery - assumed usable capacity of battery [Total energy discharged per annum] (Previous value) x 730 [Additional self consumption] Estimated annual output (Section B) x self consumption rate with battery as a % (no higher than 95%) - Expected solar PV self-consumption (with EESS) (Section D)

A. Installation data		
Installed capacity of PV system - kWp (stc)	10.560	kWp
Orientation of the PV system - degrees from South	Group 1: 24 panels with Orientation: 20 °	°
Inclination of system - degrees from horizontal	Group 1: 24 panels with Tilt: 30°	°

Postcode region	11	
B. Performance calculations		
kWh/kWp (Kk) from table	Group 1: 876	kWh/kWp
Shade Factor (SF)	24.000	
Estimated annual output (kWp x Kk x SF)	9,250	kWh
C. Estimated PV self-consumption - PV Only		
Assumed occupancy archetype	In Half Day	
Assumed annual electricity consumption, kWh	6,151.00	kWh
Assumed annual electricity generation from solar PV system, kWh	9,250	kWh
Expected solar PV self-consumption (PV Only)	2,494.60	kWh
Grid electricity independence / Self-sufficiency (PV Only)	40.56	%
D. Estimated PV self-consumption - with EESS		
Assumed usable capacity of electricity energy storage device, which is used for self-consumption, kWh	12.96	kWh
Expected solar PV self-consumption (with EESS)	5,356.17	kWh
Grid electricity independence / Self-sufficiency (with EESS)	87.0%	%
E. Additional benefits from PV and EESS		
EESS capacity not used for self-consumption	0.54	kWh
Total energy discharged per annum	394.20	kWh
Additional self-consumption for EV, heat pumps, diverters (only when present)	3431.33	kWh

Environmental Benefits

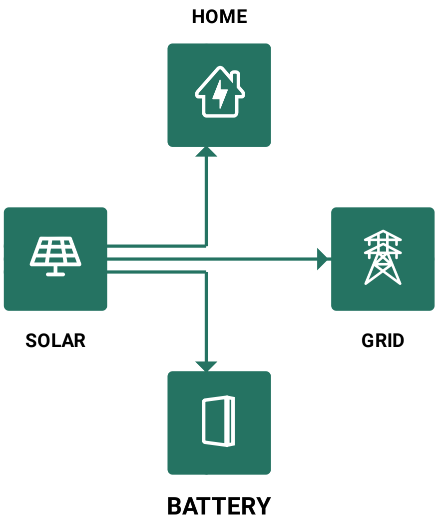
Solar has no emissions. It just silently generates pure, clean energy.

Each Year	
150%	2 tons
Of CO_2, SO_x & NO_x	Avoided CO_2 per year

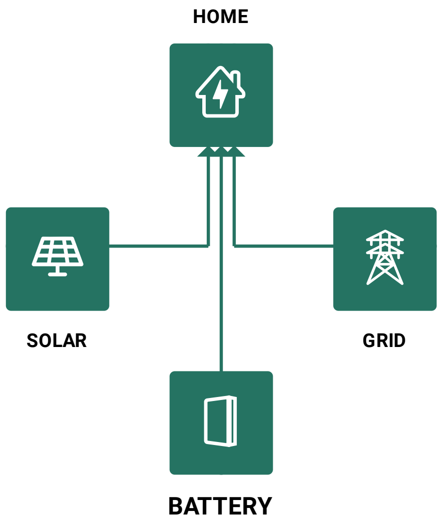
Over System Lifetime		
70,023	450	50
Car km avoided	Trees planted	Long haul flights avoided

How your system works

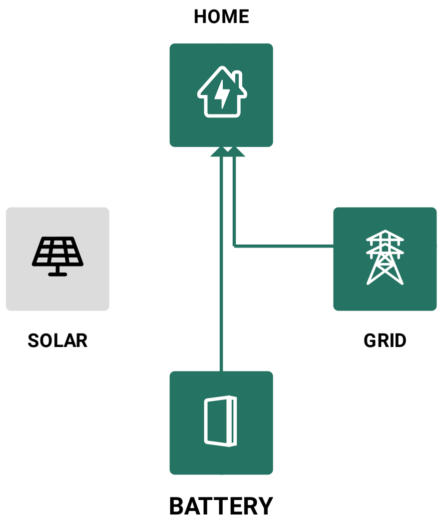
Generating Excess Solar



Partially Offset Usage



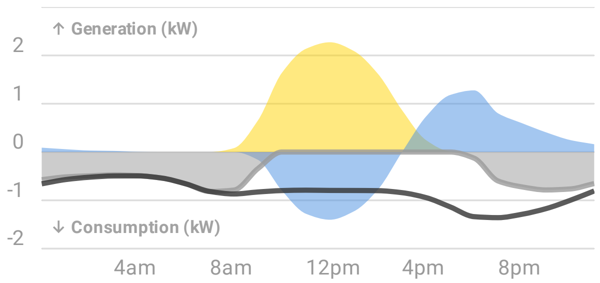
Night



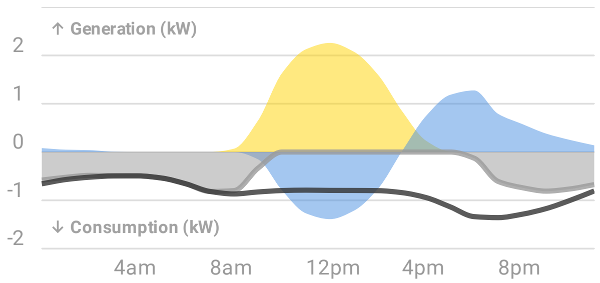
Daily Energy Flows

CONSUMPTION (kWh) GENERATION (kWh) BATTERY (kWh) NET CONSUMPTION (kWh) EXPORT TO GRID (kWh)

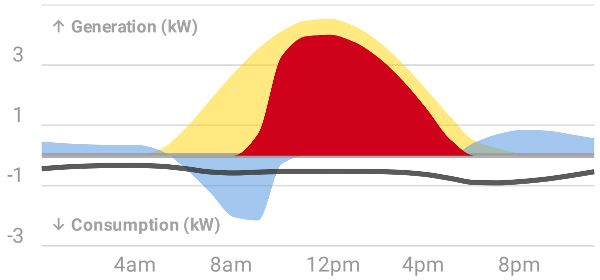
Winter Weekday



Winter Weekend



Summer Weekday



Summer Weekend