# SolarTech Solutions

Quote Ref: Q-20251202-131912
Date: 02 December 2025

## Customer Quotation

**Customer:** Mr & Mrs Smith
**Address:** 123 Solar Street, Sunnyville, SN1 2AB

### System Specification

| | |
|---|---|
| **Solar Panel Capacity:** | 4.0 kWp |
| **Battery Storage:** | 5.0 kWh |
| **Location:** | South England |
| **Roof Orientation:** | Ideal (South) |
| **Expected Annual Generation:** | 4,555 kWh |
| **Capacity Factor:** | 13.0% |

### Your Energy Profile

| | |
|---|---|
| **Heating Type:** | Gas/Oil boiler |
| **Base Electricity Usage:** | 3,500 kWh/year |
| **Total Household Consumption:** | 3,500 kWh/year |
| **EV Daily Mileage:** | 30 miles |
| **EV Charging (Home):** | 2,628 kWh/year |
| **Total Demand (incl. EV):** | 6,128 kWh/year |

### Investment

| | |
|---|---|
| **Solar PV System:** | £6,000 |
| **Battery Storage:** | £4,000 |
| | |
| **Total System Cost:** | **£10,000** |

### Payment Option

| | |
|---|---|
| **Payment Method:** | Finance |
| **Deposit:** | £2,500 (25%) |
| **Loan Amount:** | £7,500 |
| **Loan Term:** | 10 years |

| | |
|---|---|
| **Interest Rate:** | 5.0% APR |
| **Monthly Payment:** | £81 |
| **Annual Payment:** | £971 |
| **Total Interest:** | £2,213 |
| **Total Cost of Finance:** | £9,713 |

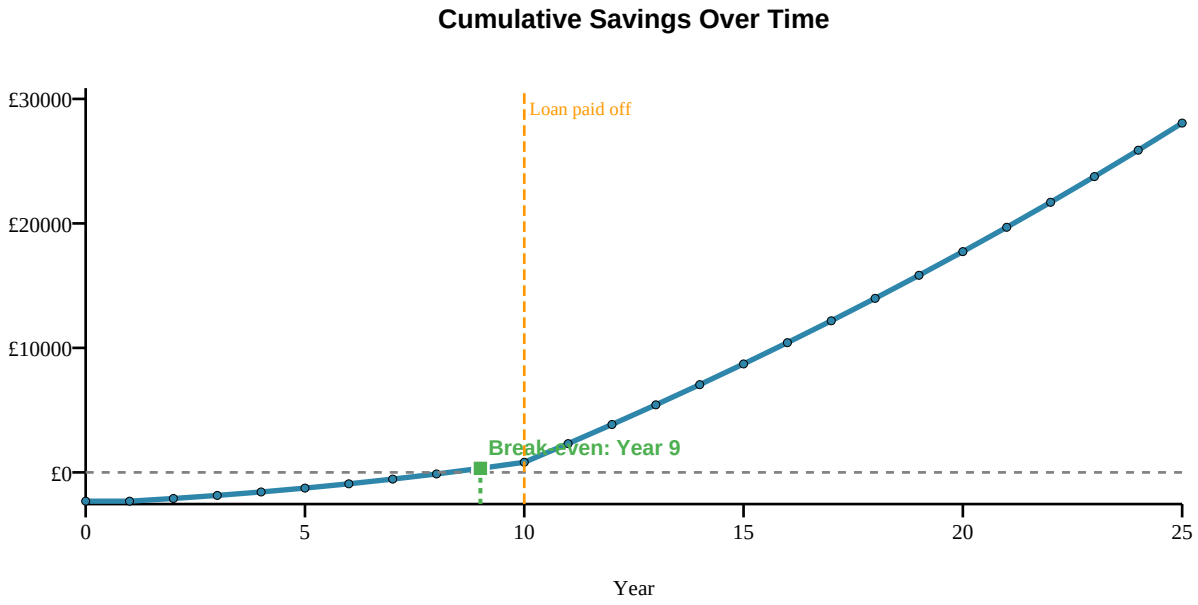
## Projected Savings

| | |
|---|---|
| **Year 1 Savings:** | £1,129 |
| **Year 1 Export Income:** | £169 |
| **Payback Period:** | 9 years |
| **NPV (25 years @ 3.0%):** | £16,155 |
| **Cumulative Benefit (Year 10):** | £812 |
| **Cumulative Benefit (Year 15):** | £8,711 |
| **Cumulative Benefit (Year 25):** | £28,059 |

## EV Charging Benefits

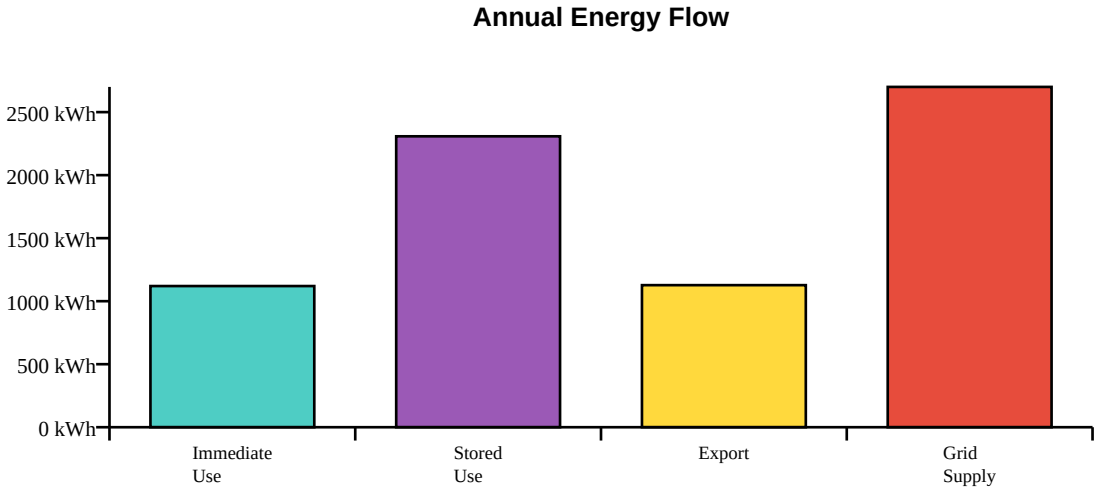
| | |
|---|---|
| **EV Charging from Solar/Battery:** | 483 kWh (18%) |
| **EV Charging from Grid:** | 2,145 kWh |
| **Annual EV Fuel Saving:** | £135 |

## Financial Projections



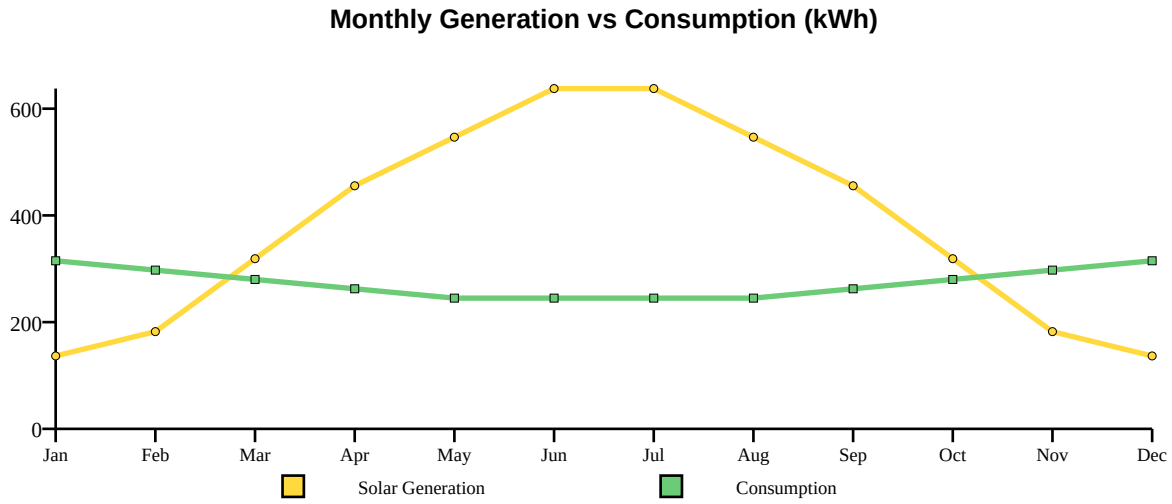

**Break-even Analysis:** Your system pays for itself in **Year 9**. After this point, all savings go directly into your pocket. Over 25 years, your total benefit is projected to be **£28,059**.

## Energy Distribution




**Self-Consumption:** 75% of your solar generation is used on-site (1,120 kWh immediate + 2,308 kWh from battery storage). The battery significantly increases your self-consumption, reducing grid dependency.

## Seasonal Performance




**Seasonal Note:** Solar generation peaks in summer (May-August) when it can exceed your consumption. The surplus is either stored in your battery or exported for income. Winter generation is lower but still contributes to your energy needs.

## Assumptions & Notes

This quotation is based on the following assumptions:
- Electricity price: 28p/kWh with 3.0% annual increase
- Export tariff (SEG): 15p/kWh
- Daytime usage: 40% of consumption during daylight hours
- Analysis period: 25 years

Actual savings will depend on your usage patterns, weather conditions, and future energy prices. This quotation is valid for 30 days from the date shown above.