

All TBC Buildings

Solar PV Impact : Offsetting all electricity after demand reduction measures implemented

System Sizing by Area

Area required	3,475 m²
Estimated capacity	695.00 kWp

System Capacity & Export

PV system chosen capacity	695 kWp
Solar collection factor (shading)	100 %
Current electricity tariff	13.6 p/kWh
kWh used on-site (offset)	75 %
Deemed export rate	25 %

Export Generation

Bonus for exported units	5.5 p/kWh
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Generation Breakdown

- Annual Generation	625,500 kWh
- Offset units	469,125 kWh (75% est)
- Exported units	156,375 kWh

Annual Revenue Breakdown

Export bonus payment	£	8,601
Potential Import savings	£	63,686
Total Benefit	£	72,286

Economics

Full installed COST	£	486,500
Cost per kWp	£	700
Basic ROI		14.9%

Simple Payback

6.7 years

Panel Data

Panel type	Mid Performance
Specific peak output	200 W/m²
Annual output	900 kWh/kWp

CO2e Offset Scenario

Scenario	T/CO2e	Equiv Elec kWh
Projected 2030 emission factor	60.57	624,395
2019 emission factor	197.30	

Approx Installation Costs - For Typical Roof Systems

Likely Installed Costs (excl. any necessary infrastructure costs)		
Solar PV - 25KW+	£	1,000 /kWp
Solar PV - 100KW+	£	800 /kWp
Solar PV - 250kW+	£	700 /kWp