

Cheddleton Community Centre Solar PV

Broad Oak Commercial Services



Financial Analysis

Your Gain

Total investment costs	23,904.00 £
Internal Rate of Return (IRR)	3.89 %
Amortization Period	17.9 Years
Electricity Production Costs	0.1272 £/kWh
Energy Balance/Feed-in Concept	Surplus Feed-in

The results have been calculated with a mathematical model calculation from Valentin Software GmbH (PV*SOL algorithms). The actual yields from the solar power system may differ as a result of weather variations, the efficiency of the modules and inverter, and other factors.



Set-up of the System

Overview

System Data

Type of System	3D, Grid-connected PV System with Electrical Appliances and Battery Systems
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Climate Data

Location	Nottingham Wxctr, GBR (1996 - 2015)
Values source	Meteonorm 8.1
Resolution of the data	1 h
Simulation models used:	
- Diffuse Irradiation onto Horizontal Plane	Hofmann
- Irradiance onto tilted surface	Hay & Davies

Consumption

Total Consumption	11200 kWh
BDEW load profile business (G2)	11200 kWh
Load Peak	2.8 kW

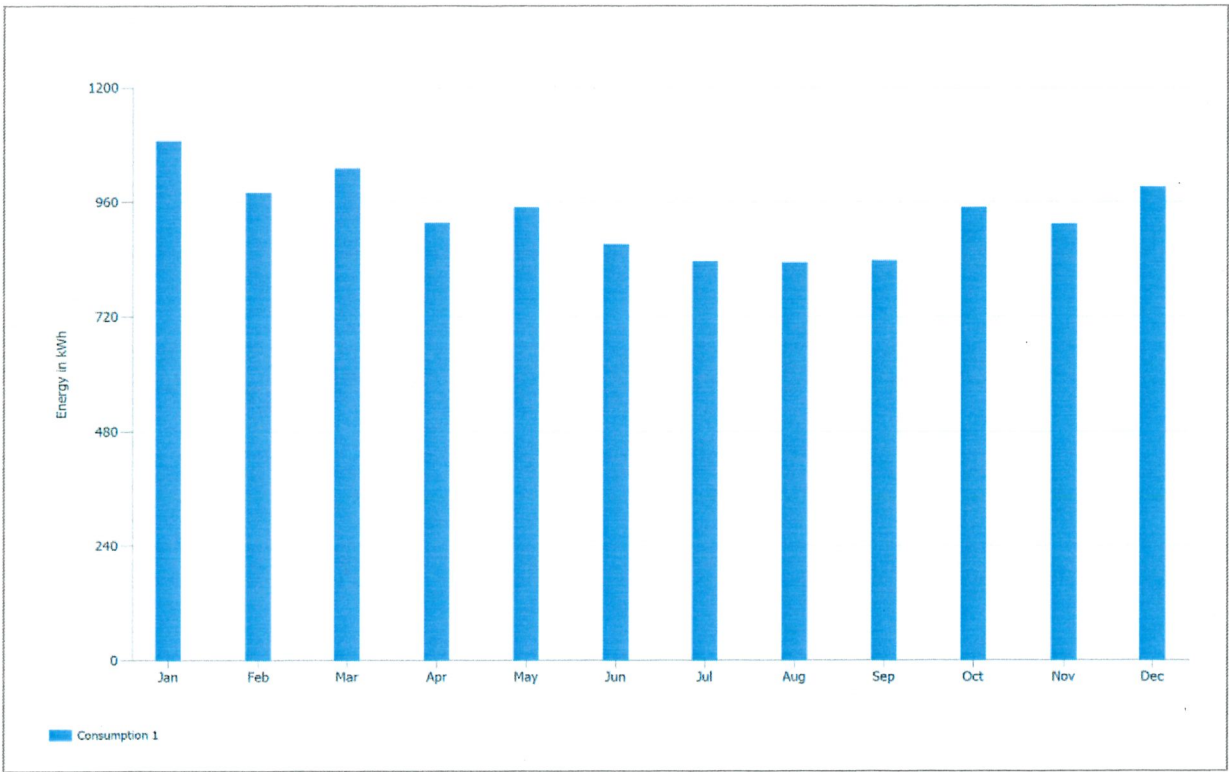


Figure: Consumption

Module Areas

1. Module Area - Arbitrary Building 01-Mounting Surface South

PV Generator, 1. Module Area - Arbitrary Building 01-Mounting Surface South

Name	Arbitrary Building 01-Mounting Surface South
PV Modules	16 x JAM72S10-415/MR (v1)
Manufacturer	JA Solar Holdings Co., Ltd.
Inclination	5 °
Orientation	South 158 °
Installation Type	Mounted - Roof
PV Generator Surface	32.1 m ²

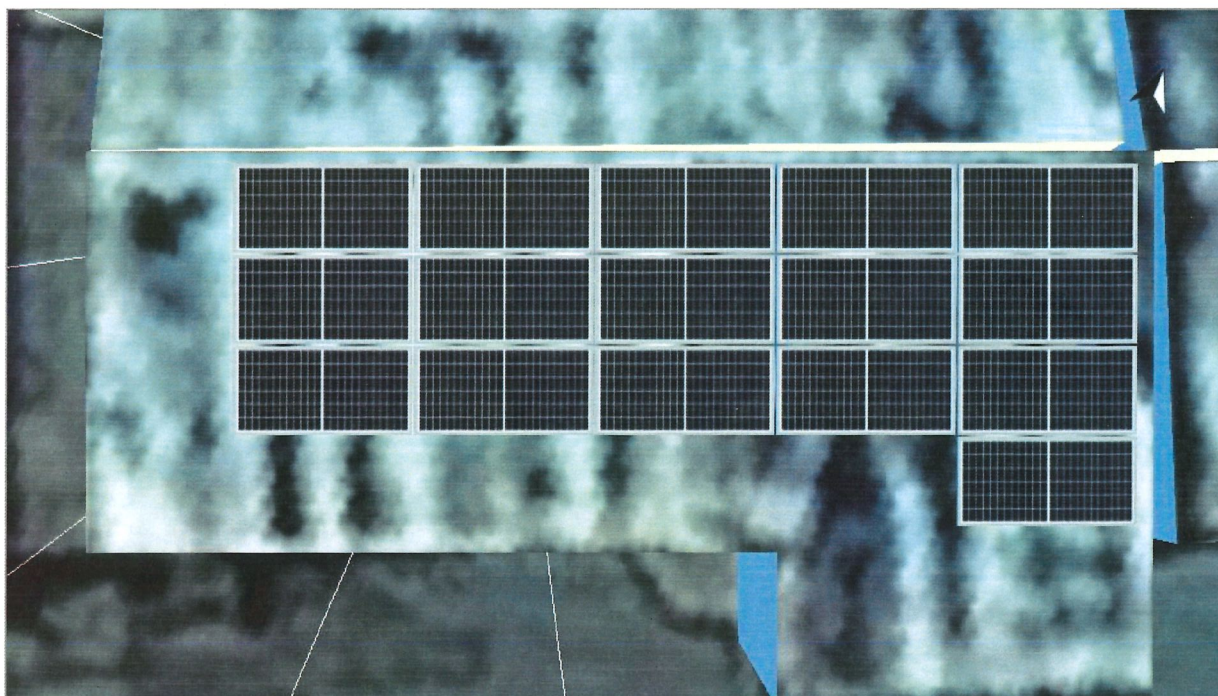


Figure: 1. Module Area - Arbitrary Building 01-Mounting Surface South



2. Module Area - Building 03-Roof Area Southeast

PV Generator, 2. Module Area - Building 03-Roof Area Southeast	
Name	Building 03-Roof Area Southeast
PV Modules	8 x JAM72S10-415/MR (v1)
Manufacturer	JA Solar Holdings Co., Ltd.
Inclination	5 °
Orientation	Southeast 155 °
Installation Type	Mounted - Roof
PV Generator Surface	16.1 m ²

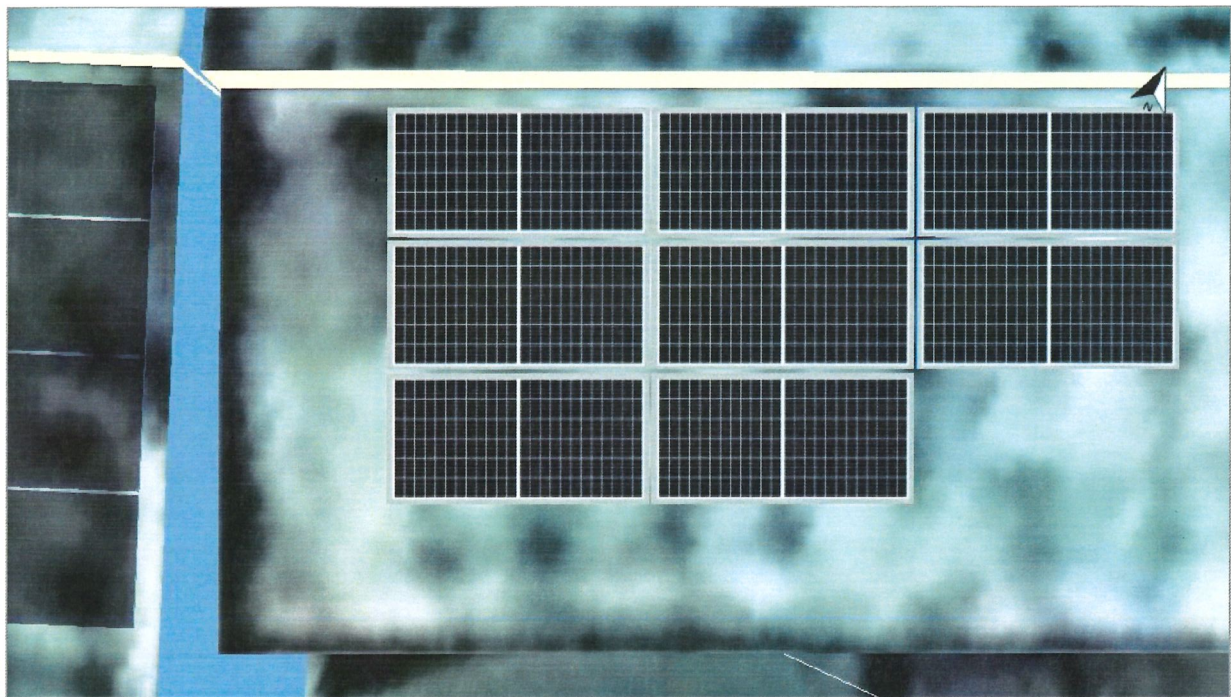


Figure: 2. Module Area - Building 03-Roof Area Southeast